OFF-ROAD VEHICLE DESIGNATIONS

ENVIRONMENTAL ASSESSMENT

June, 1980

DILLON RESOURCE AREA

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DILLON OFF-ROAD VEHICLE TRAVEL ENVIRONMENTAL ASSESSMENT

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INTRODUCTION

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Pursuant to the National Environmental Policy Act of 1969 (NEPA) the Bureau of Land Management (BLM), as well as other federal agencies prepare an environmental analysis whenever an agency's planning and decision making may have an impact on man's environment. Most analysis of BLM's actions are documented in an Environmental Assessment (EA), and, for most important actions an Environmental Impact Statement (EIS) is prepared.

Accordingly, this EA describes the proposed Off-Road Vehicle (ORV) travel program for the Dillon Resource Area, Butte District. "Off-road Vehicle" means any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use and (5) any combat or combat support vehicle when used in times of national defense emergencies.

The major objectives of this EA are to conduct a systematic and analytical assessment of the environmental impacts, including ways to minimize the adverse impacts, determine if an environmental statement is required, and document the environmental analysis. In order to achieve this purpose this analysis includes a description of (1) the proposed ORV travel program, (2) a description of the environmental components most likely to be impacted, (3) impacts to the environmental components which could be caused by the proposal, (4) mitigation measures which could be taken to minimize or eliminate impacts, (5) residual adverse impacts which would remain even after application of the mitigative measures, (6) the tradeoffs involved between short-term uses of resources and the long-term maintenance of environmental values, (7) irreversible actions and the resulting resource losses which would result from the proposed action, and (8) alternatives to the proposed action and the probable impact of those alternatives.

SUMMARY

SUMMARY

The Dillon Resource Area Off-Road Vehicle Travel Environmental Assessment analyzes the consequences of designating 954,626 acres of public land "open," "limited," or "closed" to motorized vehicle travel.

Initial development of the off-road vehicle travel program began with the update of the Dillon Management Framework Plan (MFP) in 1976. Beginning with a comprehensive resource inventory, a preliminary motorized travel management program was developed. In May 1978, five workshops were held throughout southwestern Montana to solicit public input on the MFP, including the travel management program. On the basis of the resource inventories and public comments received at these workshops, a motorized travel program was outlined.

The Dillon Off-Road Travel EA analyzes the consequences of managing motorized travel on 954,626 acres of public land in the Dillon Resource Area according to the travel program initiated in the MFP.

A proposed action and two alternatives are analyzed. The travel restrictions listed in the MFP constitute the proposed action and the two alternatives are: (1) taking no action, with only the existing vehicle restrictions continuing in effect and, (2) taking a much more restrictive approach to managing motorized travel, the limited action alternative.

The proposed action designates: (1) 711,904 acres open to all motorized travel, (2) 9,902 acres closed to motorized travel, and (3) 123,618 acres where motorized travel is limited. The existing vehicle restrictions on 109,202 acres where motorized travel has been previously restricted action would continue. Winter snowmobile travel would be permitted on 819,157 acres.

The proposed restrictions would not substantially affect recreational vehicle driving since 75 percent of public lands would be open to vehicle travel and 86 percent of the area would be open to cross-country snowmobile use. Travel restrictions in areas used extensively for hunting would shift some of the hunting use from driving-oriented to nonmotorized hunting modes. Game retrieval would be more difficult and some hunters would go to areas without travel limitations. Other hunters would value the more traditional hunting experience.

Moderately sized elk, deer, bighorn sheep security areas would be established. Localized improvements in soil, vegetation, and water quality would occur with only slight deterioration in these resources over the entire area. Miners and ranchers would require prior authorization to use motorized vehicles in restricted areas with a resultant inconvenience to their operations. A moderate amount of control on mining and ranching access would occur. Little to no direct effects would be felt by the timber industry since timber harvesting would be unaffected. Firewood cutters would experience some control since cross-country travel would not be permitted in restricted areas.

The no action alternative is considered the minimally acceptable alternative and consists of maintaining the current restrictions, and designating the remaining public lands open. Existing public lands currently designated closed would remain closed. Under this alternative 81,810 acres would be restricted from winter travel and 169,699 acres from cross-country vehicle travel.

Off-road vehicle travel would be generally unaffected since large expanses of public land would remain open. A smaller wildlife security area would be established resulting in long-term big game displacements on 75,000 acres of big game summer-fall security habitat and 33,500 acres of wintering habitat. Little control would be placed on ranchers and miners as a result of travel restrictions.

The limited action alternative consists of maintaining the existing restrictions, implementing the proposed action, and designating all remaining public lands as limited. No public lands would be designated open. Under this alternative, 135,469 acres would be restricted from winter over-the-snow travel, 6,280 acres from spring travel, and 954,626 acres from cross-country travel.

No cross-country, four-wheel type driving would be permitted, but snowmobiling would be allowed on most public lands. Soil loss would be minimized and maximum protection to vegetation and water quality would be afforded. Large security areas would be established for big game animals and their numbers would likely increase. The restrictions on cross-country travel would change current hunting patterns from motorized modes to nonmotorized. Significant impacts would be felt by those unwilling to travel by horseback or walk.

Since the entire resource area would be designated as limited, moderate to substantial control over mining and ranching operations would occur. Miners and ranchers would require prior authorizations for motorized travel contrary to the specific restrictions in a particular area. Administering the travel authorization program would be extremely time-consuming and burdensome. Firewood cutters would not be permitted to travel cross-country and this would substantially impair their cutting activities.

The following table summarizes the alternatives and their environmental consequences.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES RESULTING FROM IMPLEMENTING THE PROPOSED ACTION AND EACH ALTERNATIVE

Environmental Components	Existing Situation	Proposed Action	No Action Alternative	Limited Action Alternative
Geology & Soils	Erosion Condition Classes (acreage) Stable 37,556 Critical 125,849 Slight 172,616 Severe 8,799 Moderate 453,842	Very slight soil loss	Slight soil loss	Little to no soil loss
Vegetation	Range Condition (acreage) Excellent 90,646 Fair 222,639 Good 369,877 Poor 15,087 Not Identified 92,505	Very slight vegetative loss	Slight vegetative loss	Little to no vegetative loss
Water Resources	Good quality water, but some problem areas causing degradation	Very slight deterioration	Slight deterioration	Slight improvement
Wildlife Big Game	Small big game security area established	Moderate security area established; possible increase in numbers	Small security area established; possible decline in numbers	Large security area established; probable increase in numbers
Fisheries	Stable	Small improvement to no change	No change	Small improvement
Recreation: Off-road Vehicle Travel	816,404 acres open for four wheel cross-country travel; snowmobiles permitted on 872,816 acres	756,313 acres open for four-wheel cross-country travel; snowmobiles permitted on 819,159 (total acreage includes existing restrictions)	816,404 acres open for four-wheel cross-country travel; snowmobiles permitted on on 872,816 acres	No cross-country four-wheel driving permitted; snowmobiles permitted on on 819,159 acres (total acreage includes existing restrictions)
Hunting	Average hunting opportunities	Slight improvement in hunter success	Slight decrease in in hunter success	Slight to moderate increase in hunter success
Nonmotorized Activities	Diverse, above average quality	Opportunities enhanced on a moderately sized area	Opportunities enhanced on a small area	Opportunities enhanced on a large area

SUMMARY OF ENVIRONMENTAL CONSEQUENCES RESULTING FROM IMPLEMENTING THE PROPOSED ACTION AND EACH ALTERNATIVE
(continued)

Environmental Components	Existing Situation	Proposed Action	No Action Alternative	Limited Action Alternative
Wilderness	10 proposed Wilderness Study Areas 3 Instant Wilderness Study Areas	Wilderness suitability maintained	Wilderness suitability maintained	Wilderness suitability maintained
Cultural Resources	Decreased rate of deterioration on 57 sites	Decreased rate of deterioration on 132 sites	Decreased rate of deterioration on 57 sites	Decreased rate of deterioration on 326 sites
Livestock Grazing	268 operations harvest 125,377 AUMs annually; Little restriction on access	Insignificant loss of forage production Some restrictions on access	Insignificant loss of forage production Little restriction on access	No change or very small increase in forage production. Moderate to substantial control on access
Mineral Resources	Moderate development of locatable minerals and leasables; substantial interest in oil and gas	Little to moderate control over mining access	Little to no control over mining access	Moderate to substantial control over mining access
Forestry	Present sales 1.75 million board annually	Little to no effect on timber sales; little to moderate effect on firewood cutting	No effect on timber sales; very little effect on firewood cutting	Little effect on timber sales; moderate to substantial effect on firewood cutting
Visual Resources	Visual quality varies from below average to high	Little to no change	No change	Little to no change
Socio-Economic	Typically rural	Slight economic decrease; Slight to moderate lifestyle impact	No economic change; Slight lifestyle impact	Slight economic decrease; moderate lifestyle impact

CHAPTER I

PROPOSED ACTION AND ALTERNATIVES

CHAPTER I

PROPOSED ACTION AND ALTERNATIVES

PURPOSE

The purpose of this analysis is to propose and evaluate motorized travel restrictions in those areas recommended for travel management in the Dillon Management Framework Plan which have not been previously restricted.

An implementation plan will be prepared prior to final designation. The purpose of the implementation plan will be to define and document all those actions (i.e., maps, signs, enforcement, monitoring, etc.) necessary to accomplish the off-road vehicle designation decisions.

BACKGROUND

In February 1972, the President of the United States issued Executive Order 11644 (subsequently clarified by Executive Order 11989; see Appendix A for copies of both Orders). This Order established a unified federal policy toward the use of off-road vehicles (ORVs) on public lands. The purpose of the Order was to establish policy and provide for procedures to ensure that the use of ORVs on public lands is controlled and directed so as to protect the resources, promote the safety of all the users, and minimize conflicts among the various uses of those lands. The Order directed each of the designated agencies to develop and issue regulations and administrative instructions to provide for the designation of specific areas and trails where ORV use may or may not be permitted.

The Department of Interior, as mandated by the Order, issued final regulations for providing management of ORV use on BLM-administered lands (hereafter referred to as public lands) in July 1979. According to these regulations (43 CFR 8342.1), the BLM is required to designate all public lands as either open, limited, or closed to ORV travel.* All designations are to be based on the previously stated policies and in accordance with the following criteria.

a. Designations will minimize damage to soil, watershed, vegetation and air.

b. Designations will minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.

c. Designations will minimize conflicts between off-road vehicle use and other existing or proposed recreational uses.

d. Designations will prevent impairment of wilderness suitability.

e. Designations will minimize damage to scenic and visual resources.

f. Designations will minimize damage to natural, cultural, or historic resources.

According to the ORV regulations, the designations are to be made to the extent practical in conjunction with the formulation of multiple use management plans, and, where possible according to BLM manual policy, within one year of the completion of those plans.

MANAGEMENT GUIDANCE AND RESPONSIBILITY

Development of the proposed motorized travel program initially began with the formulation of the Dillon Management Framework Plan (MFP). Beginning with the multidisciplinary resource inventories contained in the Unit Resource Analysis (URA) and socioeconomic data presented in the Planning Area Analysis (PAA), management decisions were developed in the MFP. The URA, as it pertained to motorized vehicle travel, was a detailed compilation of inventory data which indicated where restrictions wereneeded to protect wildlife, watershed, recreation, and visual resources. Based upon a multiple use analysis of this inventory and motorized vehicle travel restriction recommendations presented by the resource specialists, a travel management program was developed in the MFP.

This multiple use management plan recognizes that motorized vehicle use is a legitimate use of the public lands, but that in certain situations, some public land areas require ORV travel management.

The travel program not only recommends vehicle restrictions in areas currently experiencing adverse impacts from motorized travel, but also recommends restrictions in areas likely to be impacted from future motorized travel.

Restrictions have already been implemented in five of the areas listed in the MFP. These include the Axolotl Lakes, East Fork Blacktail, Dyce Creek, Culver Springs and Muddy Creek areas.

***Open** areas and trails are designated areas and trails where ORVs may be operated subject only to the operating regulations and vehicle standards set forth in the regulations.

Limited areas and trails are designated areas and trails where the use of ORVs is subject to the restrictions deemed appropriate. Authorized travel may be permitted for activities such as livestock grazing, mining, post and pole cutting, etc., through the issuance of approved permits.

Closed areas and trails are designated areas and trails where all vehicle use except emergency travel is permanently or temporarily prohibited. No permits may be issued for any motorized travel (i.e., livestock grazing, mineral development, official use, etc.).

In addition, ten proposed Wilderness Study Areas (WSAs) and Instant Wilderness Study Areas (ISAs) currently carry restrictions on motorized travel as required by interim management policy for areas under wilderness review. Pending the final outcome of the wilderness appeal process areas may be added or deleted. Those areas brought back into the wilderness review process will automatically carry restrictions on motorized travel as dictated by BLM policy.

Table 1.1 lists the existing restricted areas, including the proposed WSAs and ISAs. Map D displays these areas.

PROPOSED ACTION AND ALTERNATIVES

A proposed action (Map A) and two alternatives are being evaluated. The alternatives include the no action alternative (Map B), and the limited action alternative (Map C). Map D gives specific, detailed information on each existing restricted area and proposed restricted area.

The alternative of designating all public lands closed to motorized travel was initially considered but determined unfeasible for two reasons. First, officially designating the entire resource area closed to all vehicle use (i.e., no motorized travel except emergency uses) would impair, if not totally preclude, multiple use management of public lands. Second, designating all public lands closed would violate BLM's policy which states that designations will be consistent with the objectives in the MFP.

These broad philosophically different alternatives, rather than site-specific alternatives, are presented in order to facilitate the analysis and make it more understandable. Public response and input will provide the site-specific alternatives that will serve as a basis for determining the final restrictions in all areas.

Table 1.2 lists, summarizes, and compares the type of designation and acreage affected for the proposed action and each of the alternatives. All existing restrictions are included in the acreage figures to provide an overall view of travel management on public lands. These existing restrictions will remain in force regardless which alternative or combination of alternatives is implemented.

The travel restrictions put forth in the proposed action and alternatives apply to all vehicles regardless of the purpose for which they are being used. The Dillon MFP states, however, that authorized travel in "limited" areas may be granted on a case-by-case basis so that lessees, permittees, contractors and claimants may enjoy the privileges extended to them through approved permits, licenses, and the 1872 mining law. Emergency vehicles, vehicles in official use, and any other vehicle whose use is expressly authorized by the BLM can also be used in designated "limited" areas. Only emergency vehicles are permitted in designated "closed" areas.

The intent of the travel restrictions in the MFP and this document is to regulate public travel. Other uses would be restricted only when it is determined that the travel would not significantly harm the resources for which the restriction was implemented to protect or when authorized travel would not create public enforcement problems. Appendix C illustrates the method to be used in processing travel requests.

Implementation of this travel plan will begin on December 1, 1980. A revised plan will be initiated the following year and every two years thereafter to incorporate new information. Public response will be actively solicited throughout the plan revision. This revised plan will be a coordinated BLM/Forest Service travel program in which all designations are similar and delineated on the same map.

A. Proposed Action

Each of the areas proposed for travel restrictions under the proposed action is an area recommended for ORV management in the MFP. However, since the MFP is a broad land use allocation process not intended to make site-specific proposals, certain boundary adjustments and modifications have been made in some of the MFP proposals in order to more accurately reflect resource needs and facilitate administration.

Travel restrictions are not proposed in seven areas and two roads listed for ORV management in the MFP because additional inventory and field review are needed prior to formulating a specific proposal. These areas include:

Ruby Mountains
Craver Creek
Northside Centennial Valley
Morrison-Hildreth Creeks
Bender Creek
Quaking Aspen Creek
Everson-Black Canyon-Frying Pan

The BLM is continuing with further inventory to determine the type and degree of travel management required in these areas.

Remaining public lands not proposed for travel restrictions in the Dillon MFP will continue to be open and designated as such because no information exists in the current planning inventory to justify limiting vehicle travel or closing areas. These areas will also be evaluated on a continuing basis.

TABLE 1.1: EXISTING OFF-ROAD VEHICLE TRAVEL RESTRICTIONS

Map Code	Unit Name	Designation	Acreage
1	Bad Luck Creek WSA	Limited	640
3	Culver Springs	Limited	40
4	Humbug Spires Periphery	Limited	4,133
5	Bear Trap Canyon ISA	Closed	2,861
6	Centennial Mountains ISA	Limited	38,424
13	Dyce Creek	Limited	11,969
19	Ruby Mountains WSA	Limited	26,357
21	Bell-Limeliln WSA	Limited	6,629
22	Henneberry Ridge WSA	Limited	10,111
23	Tobacco Root Tackon WSA (Bumpy Mountain)	Limited	560
24	Madison Tackon WSA	Limited	869
25	Farlin Creek WSA	Limited	1,260
26	Axolotl Lakes	Limited	7,488
27	Centennial Tackon ISA	Limited	7,702
28	Tobacco Root WSA (Shakey Spring)	Limited	360
30	Blacktail Ridge WSA	Limited	13,960
31	East Fork Blacktail	Limited	6,180
32	Muddy Creek	Limited	15,335
33	Hidden Pasture WSA	Limited	6,625
35	Humbug Spires ISA	Closed	7,041
36	Bear Trap Tackon ISA	Limited	1,155
	Total Acreage		169,699

TABLE 1.2

Type of Action	Acres Designated Open	Acres Designated Limited	Acres Designated Closed
Proposed Action	711,904	232,820[1]	9,902
No Action Alternative	784,927	159,797[1,2]	9,902
Limited Alternative	0	944,724	9,902

[1] Includes 123,618 acres proposed under this action.

[2] Includes only existing restrictions.

Those WSAs dropped from wilderness consideration which are not an MFP proposal or do not require travel restrictions based on future information would be subsequently designated "open." These areas include:

Bell-Limekiln
Henneberry Ridge
Tobacco Root Tack-on (Bumpy Mountain)
Farlin Creek
Centennial Tack-on
Bear Trap Canyon Tack-on
Tobacco Root Tack-on (Shakey Spring)
Madison Tack-on
Axolotl Lakes (910 acres; does not include the area previously restricted to protect the Axolotl population and watershed values)

WSAs and ISAs which are currently restricted on the basis of their wilderness study status and are proposed for restrictions in the MFP to protect resources other than wilderness suitability are proposed and evaluated herein on the basis of the MFP decision. These areas are Blacktail Ridge/Jake Canyon, Hidden Pasture, Bear Trap Canyon, Humbug Spires, Humbug Spires Periphery and Bad Luck Creek.

Table 1.3 lists each of the areas where restrictions are proposed. Appendix B further identifies the type of restriction proposed for all areas of the public land within the resource area and gives a brief rationale for proposing the designation. Only two areas, Humbug Spires and Bear Trap Canyon,would be designated "closed." All other areas would be designated "limited" with the specific restriction for each area identified in Table 1.3. Map A provides an overview of the proposed and existing restrictions and Map D provides detailed information.

B. No Action Alternative

The No Action alternative constitutes designating all public lands open to off-road vehicle travel except the 169,699 acres which are currently restricted (i.e. maintaining the status quo). Although a true No Action alternative would leave the open public lands undesignated the decision to designate these lands "open" was taken to simplify the analysis and make it more understandable. The same amount of affected acreage and identical impacts would occur regardless if these open lands were left undesignated or designated. The only difference is that the true No Action alternative would be in conflict with Executive Order 11644 and the ORV regulations which require all public lands to be designated. Officially designating the unrestricted lands "open" would insure compliance with the Executive Order and ORV regulations. Any Wilderness Study Area or Instant Study Area currently restricted on the basis of its wilderness study status and dropped from wilderness consideration would automatically be designated open. Map B displays this alternative.

C. Limited Alternative

This alternative consists of designating the entire 954,626 acres of public land in the Dillon Resource Area "limited" to off-road vehicle travel. The specific components of the action include: (1) continuing with the previously implemented restrictions, (2) implementing the recommended winter and spring restrictions as presented in the proposed action, and (3) restricting all motorized travel to designated/existing routes year long in the remaining area. Cross-country over-the-snow travel would be allowed in those areas not specifically restricted from winter travel.

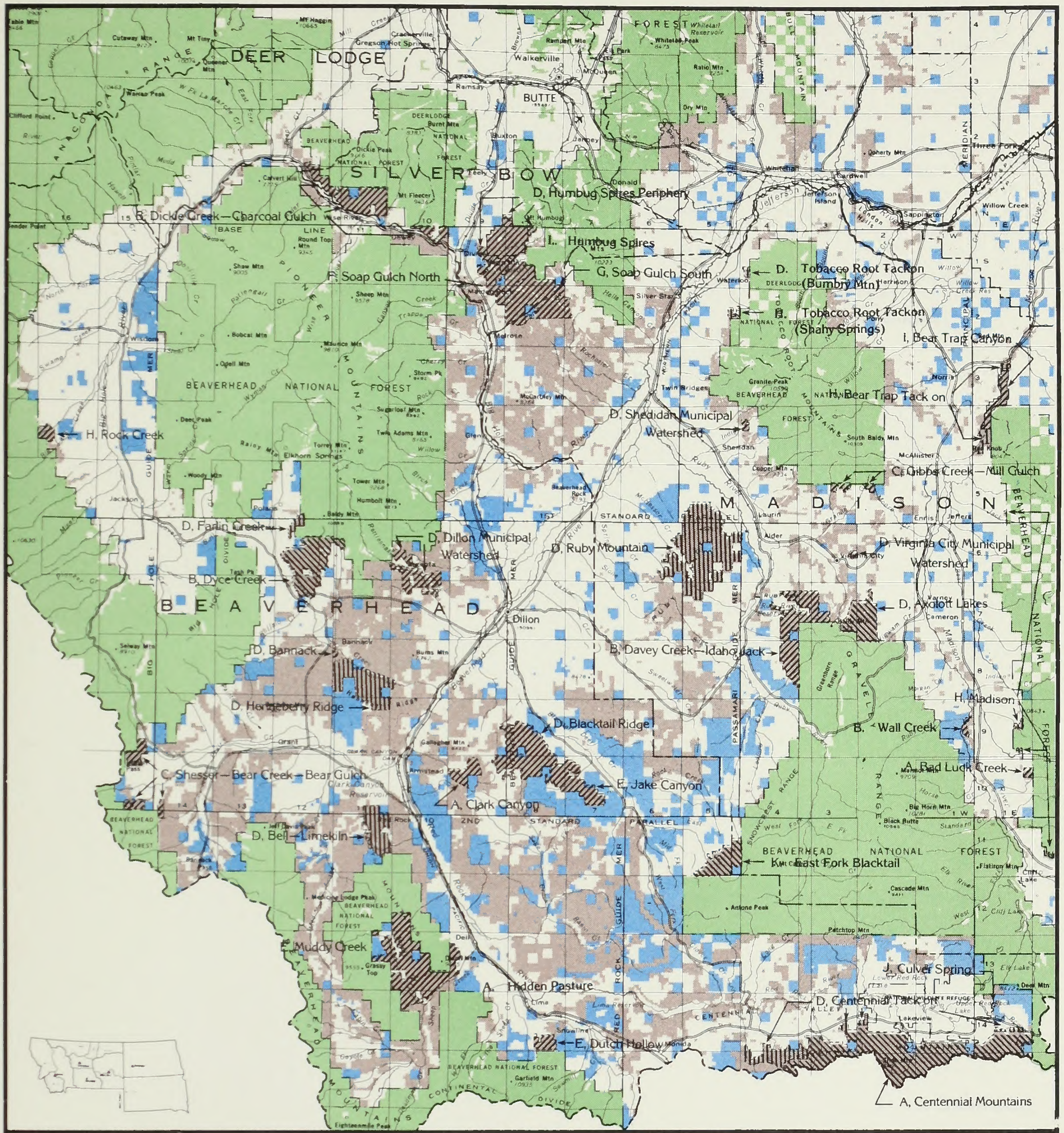
TABLE 1.3

PROPOSED DILLON RESOURCE AREA ORV TRAVEL RESTRICTIONS

Map Code	Area Name	Size (Acres)	Management Restriction	Rationale
1	Bad Luck Creek	640	Motorized travel limited to authorized users only.	Wintering bighorn Wintering/calving elk Spring/fall mule deer habitat
2	Clark Canyon	2,280	Motorized travel limited to authorized users only.	Summer/fall elk habitat Unstable, wet saturated soils Adjoining elk wintering area
4	Humbug Spires Periphery	4,133	All motorized travel restricted to designated routes from May 1 to November 30--Closed to all vehicles from December 1 to May 1.	Yearlong bighorn habitat Elk and mule deer winter habitat Nonmotorized recreation WSA.
5	Bear Trap Canyon	2,861	Closed to all motorized travel yearlong.	Nonmotorized recreation
7	Davey Creek-Idaho Jack	12,980	No motorized travel permitted from December 1 to May 1.	Wintering elk
8	Dickie Hills-Charcoal Gulch	12,825	No motorized travel permitted from	Wintering elk
9	Jake Canyon	7,180	All motorized travel restricted to designated routes from May 1 to November 30--Closed to all vehicles from December 1 to May 1.	Elk summer/fall/winter habitat
10	Wall Creek	315	No motorized travel permitted from December 1 to May 1.	Wintering elk
11	Soap Gulch North	4,881	All motorized travel restricted to designated routes from October 15 to November 30--Closed to all vehicles from December 1 to May 1.	Yearlong bighorn habitat Elk and deer winter Summer/fall mule deer habitat
12	Rock Creek	1,390	No unauthorized motorized travel permitted from May 1 to November 30 over-snow travel permitted from December 1 to May 1.	Summer/fall elk habitat
14	Soap Gulch South	16,868	All motorized travel restricted to designated routes October 15 to November 30.	Bighorn yearlong Summer/fall mule deer habitat

TABLE 1.3: PROPOSED DILLON RESOURCE AREA ORV TRAVEL RESTRICTIONS (Cont.)

Map Code	Area Name	Size (Acres)	Management Restriction	Rationale
15	Shesser-Bear Creek-Bear Gulch	4,960	No motorized travel permitted from May 1 to July 1.	Elk calving
16	Gibbs Creek-Mill Gulch	1,320	No motorized travel permitted from May 1 to July 1.	Elk calving
17	Virginia City Municipal Watershed	320	All motorized travel restricted to designated routes yearlong except over-the-snow vehicles operating from December 1 to May 1.	Municipal Watershed
18	Sheridan Municipal Watershed	505	All motorized travel restricted to designated routes yearlong except over-the-snow vehicles operating from December 1 to May 1.	Municipal Watershed
20	Dillon Municipal Watershed	5,984	All motorized travel restricted to designated routes yearlong except over-the-snow vehicles operating from December 1 to May 1.	Municipal Watershed
29	Dutch Hollow	1,800	All motorized travel restricted to designated routes from May 1 to November 30. Closed to all vehicles from December 1 to May 1.	Summer/fall mule deer habitat elk winter
30	Blacktail Ridge	13,960	All motorized travel restricted to designated routes yearlong except over-the-snow vehicles operating from December 1 to May 1.	Summer/fall elk habtat WSA.
32	Muddy Creek	15,335	All motorized travel restricted to designated routes from May 1 to November 30. Closed to all vehicles from December 1 to May 1.	Summer/fall winter elk and deer habitat
33	Hidden Pasture	6,625	Motorized travel limited to authorized users only.	Bighorn Sheep introduction
34	Bannack	305	All motorized travel restricted to designated routes yearlong except over-the-snow vehicles operating from December 1 to May 1.	National Register Historic Place
35	Humbug Spires	7,041	Closed to all motorized travel yearlong.	Nonmotorized Recreation
	Total Acreage	123,618		



Legend

🟫 Bureau of Land Management (surface)

🟩 U.S. Forest Service (surface)

🟦 State of Montana (surface)

——— Closed to all motorized travel

- - - - Limited Access

▨ Proposed Travel Restrictions

▧ Previous Implemented Restricted Area

▥ Wilderness Study Area (WSA)

United States Department of the Interior
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Butte District Office

Dillon Area Office

MAP A PROPOSED ACTION

A. Motorized travel limited to authorized users only

B. No motorized travel permitted from December 1 to May 1.

C. No motorized travel permitted from May 1 to July 1.

D. All motorized travel restricted to designated routes yearlong except oversnow vehicles operating from December 1 to May 1.

E. All motorized travel restricted to designed routes from May 1 to November 30 — Closed to all vehicles from December 1 to May 1.

F. All motorized travel restricted to designated routes from October 15 to November 30 — Closed to all vehicles from December 1 to May 1.

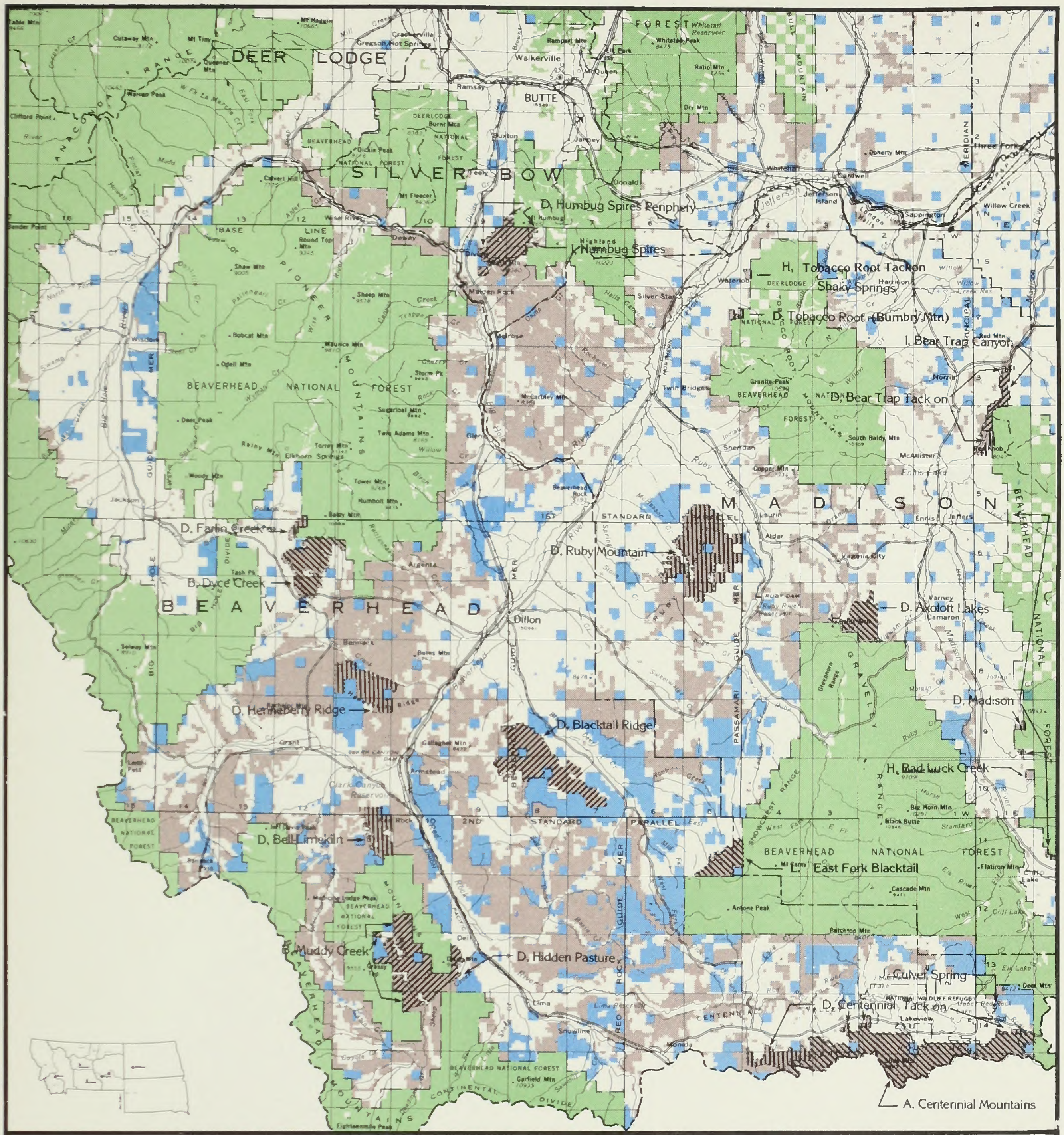
G. All motorized travel restricted to designated routes from October 15 to November 30.

H. No unauthorized motorized travel permitted from May 1 to November 30 — Over snow travel permitted from December 1 to May 1.

I. Closed to all motorized travel yearlong.

J. No motorized travel permitted from March 1 to July 1.

K. All motorized travel restricted to designated routes from May 16 to November 30 — Closed to all vehicles from December 1 to May 15.



Legend

🟫 Bureau of Land Management (surface)

🟩 U.S. Forest Service (surface)

🟦 State of Montana (surface)

—— Closed to all motorized travel

- - - - Limited Access

▨ Proposed Travel Restrictions

▨ Previous Implemented Restricted Area

▥ Wilderness Study Area (WSA)

United States Department of the Interior
Bureau of Land Management

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Dillon Area Office

MAP B NO ACTION ALTERNATIVE

A. Motorized travel limited to authorized users only

B. No motorized travel permitted from December 1 to May 1.

C. No motorized travel permitted from May 1 to July 1.

None

D. All motorized travel restricted to designated routes yearlong except oversnow vehicles operating from December 1 to May 1.

E. All motorized travel restricted to designed routes from May 1 to November 30 — Closed to all vehicles from December 1 to May 1.

None

F. All motorized travel restricted to designated routes from October 15 to November 30 — Closed to all vehicles from December 1 to May 1.

None

G. All motorized travel restricted to designated routes from October 15 to November 30.

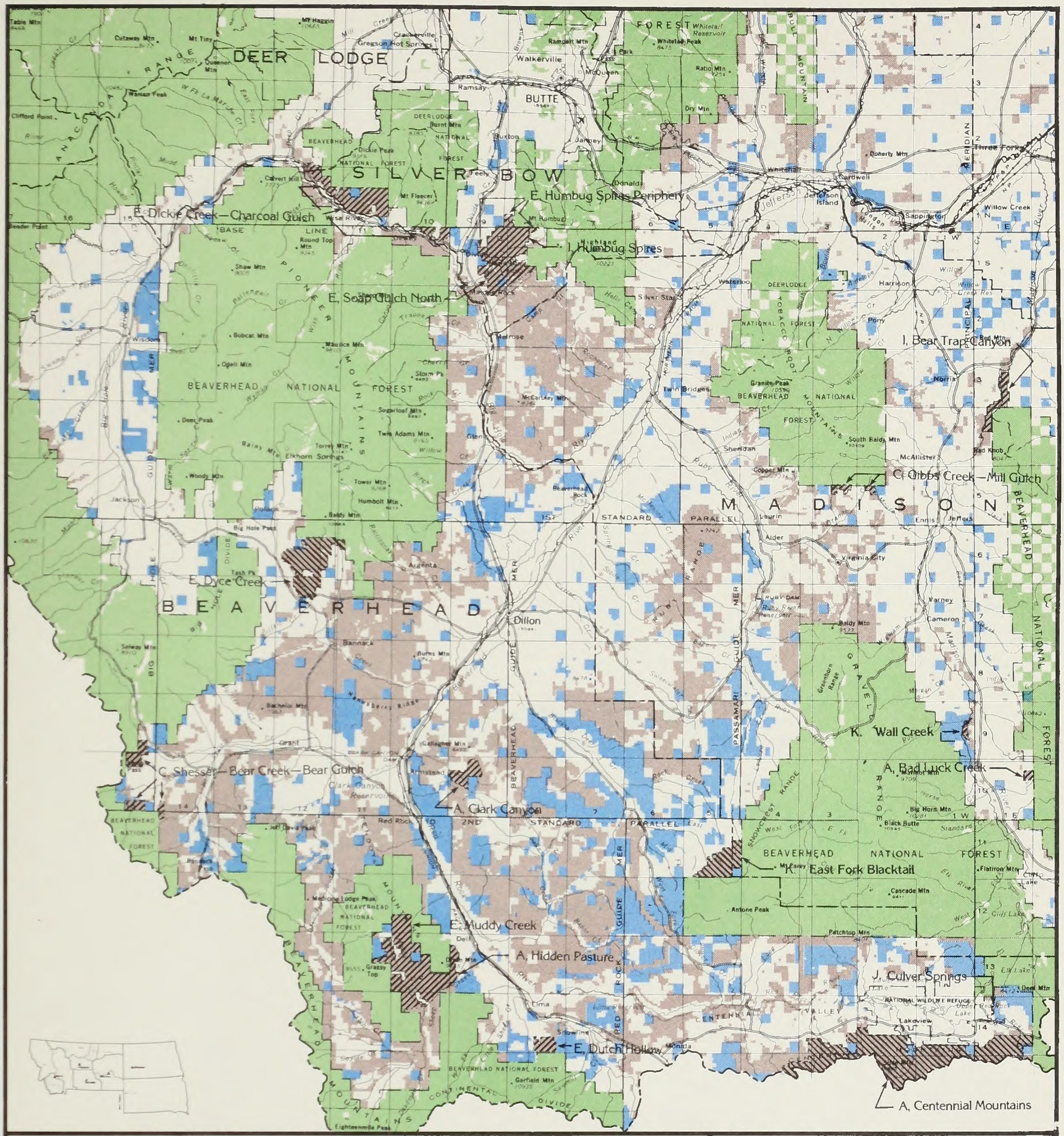
None

H. No unauthorized motorized travel permitted from May 1 to November 30 — Over snow travel permitted from December 1 to May 1.

I. Closed to all motorized travel yearlong.

J. No motorized travel permitted from March 1 to July 1.

K. All motorized travel restricted to designated routes from May 16 to November 30 — Closed to all vehicles from December 1 to May 15.'



Legend

🟫 Bureau of Land Management (surface)

🟩 U.S. Forest Service (surface)

🟦 State of Montana (surface)

— Closed to all motorized travel

- - - Limited Access

▨ Proposed Travel Restrictions

▨ Previous Implemented Restricted Area

▥ Wilderness Study Area (WSA)

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Bureau of Land Management

Butte District Office

Dillon Area Office

MAP C LIMITED ACTION ALTERNATIVE

A. Motorized travel limited to authorized users only

B. No motorized travel permitted from December 1 to May 1.

None

C. No motorized travel permitted from May 1 to July 1.

▭ D. All motorized travel restricted to designated routes yearlong except oversnow vehicles operating from December 1 to May 1.

E. All motorized travel restricted to designed routes from May 1 to November 30 — Closed to all vehicles from December 1 to May 1.

F. All motorized travel restricted to designated routes from October 15 to November 30 — Closed to all vehicles from December 1 to May 1.

None

G. All motorized travel restricted to designated routes from October 15 to November 30.

None

H. No unauthonized motorized travel permitted from May 1 to November 30 — Over snow travel permitted from December 1 to May 1.

None

I. Closed to all motorized travel yearlong.

J. No motorized travel permitted from March 1 to July 1.

K. All motorized travel restricted to designated routes from May 16 to November 30 — Closed to all vehicles from December 1 to May 15.

CHAPTER II

DESCRIPTION OF THE ENVIRONMENT

CHAPTER II

DESCRIPTION OF THE ENVIRONMENT

CLIMATE AND AIR QUALITY

Climate within the resource area can be described as a typical semi-arid intermontane climate, which varies considerably with elevation and aspect. Precipitation varies from 8 to 26 inches per year with the highest elevations receiving somewhat more. Approximately 13 percent of the precipitation occurs from January through March, 72 percent from April through September, and 15 percent from October through December. Much of the summer precipitation falls as high-intensity, short-duration thunderstorms. Winter weather is affected by arctic air masses from Canada, and, to a lesser extent, from Pacific air masses spilling over the Continental Divide from the west. Snowfall can occur at any time of the year, with March recording the most snowfall, followed by January and December.

Temperatures range from -50 degrees Fahrenheit in the winter to 100 degrees in the summer. The movement of arctic air masses often results in subzero temperatures for several days at a time during the winter.

Air quality in the study area is currently regarded as good (pristine). Severe dry weather may produce dirty periods when particulate matter becomes visible as haze. Air stagnation and poor ventilation in the atmosphere cause the air to appear worse in autumn. Sources of air contaminants include smelters and chemical companies in the Butte mining district, four lumber mills, a talc plant, a cement plant, a chemical plant, gravel crushing operations, mining in varying degrees, vehicle emissions, and forest slash burning. Dust is blown about in and near the area from fallow fields, roads, and other places where bare soil is exposed.

TOPOGRAPHY

The topographic influences found within the Dillon Resource Area vary considerably from flat, broad river valleys, rolling uplands, and sharp crested mountains to dramatic fault escarpments such as that found on the northern slopes of the Centennial Mountains. Elevation ranges from a low of about 4,500 feet near Whitehall to a high of 11,316 feet on the east side of the area in the Madison Range. The Continental Divide forms the southern and western borders of the resource area. Five major river valleys, the Ruby, Beaverhead, Centennial, Big Hole, and Madison separate and isolate the surrounding mountain ranges. Among the 16 mountain ranges that lie wholly or partly within the resource area are the Pioneers, the Pintlars, the Tobacco Roots, Ruby, Highland, and Centennial Mountains, and the Bitterroot, Greenhorn, Fleecer, Blacktail, Sweetwater, and Madison Ranges. With the exception of the Centennial Mountains, most of these mountain ranges and corresponding valleys follow a general north-south trend.

GEOLOGY AND SOILS

Southwestern Montana is a region in which almost all types of geology are displayed. The present physiography of the resource area is directly related to the complex geology that formed during the mountain building period approximately 60 million years ago. The three major rock types, igneous, metamorphic, and sedimentary, are all well represented in the area. The rock ages range from early pre-Cambrian (more than 600 million yearsold) to very recent (less than 10,000 years old).

The soils found within the resource area range from sand dunes to dense clays. They are developing in deposits of basalt, limestone, sandstone, conglomerate, mudstone, argillites, quartzites, and granite. The range of chemical and physical characteristics are diverse and extremes of a particular soil property may be found within a soil association. Detailed descriptions of all soil mapping units can be found on file in the BLM Dillon Resource Area office.

A total of 134,648 acres (15 percent) is currently classified in either a critical or severe erosion condition. Much of the resource area (50 percent), however, is suffering from moderate erosion which is unacceptable as evaluated by the BLM soil surface factors erosion condition method. Considerable topsoil is being lost by accelerated erosion on areas within both these higher erosion classes. Because of lowered vegetative density, a substantial portion of the area can no longer adequately handle runoff from the thunderstorms and spring snowmelt. This results in extensive accelerated sheet erosion, gullying, and rilling.

A number of soil families found within the resource area are of special concern in regards to off-road vehicle travel. Because of their sensitivity toerosion and compaction, these soils are unable to accommodate significant amounts of use. These soil types include Typic Cryopsamments, Typic Cryothents, Borollic Haplargids and Paleargids, Argic Cryoborolls, Lithic Cryoborolls, and Aridic Argiborolls.

Many of these soils contain high percentages of clay and are susceptible to compaction. Others are shallow, dry soils, incapable of supporting sufficient vegetative cover to prevent soil erosion. In addition there are various wet areas, saline spots, clay spots, and gullies that are sensitive to impacts from extensive off-road vehicle travel. Areas of concern include Muddy Creek Basin and Clark Canyon.

VEGETATION

The vegetation communities of the resource area are highly variable and complex because of differences in precipitation, soils, geology, topography, and human activities. The major vegetation types occurring within this area include grassland (31 percent), meadow (2 percent), sagebrush (48 percent), mountain shrub (2 percent), conifer (11 percent), and waste (6 percent). The riparian vegetation type, although not a major vegetation type in terms of acreage, has exceptional value for wildlife, recreation, and range uses.

The grasslands comprise two major categories: the lower elevation, dry sites, which are dominated by needle-and-thread and blue grama, and the higher elevation, moister sites, dominated by bluebunch wheatgrass and Idaho fescue.

In moist meadows where water is abundant throughout the year, vegetation is comprised primarily of bluegrasses, sedges, rushes, bromegrasses, shrubby cinquefoil, iris, and woody riparian vegetation. Principal dry meadow species include the bunch grasses such as slender wheatgrass, western wheatgrass, basin wildrye and minor amounts of shrub species.

A mixture of sagebrush species occurs within the sagebrush type, with big sagebrush communities comprising the bulk (86 percent) of this type. Other shrubs include Douglas rabbitbrush, rubber rabbitbrush, fringed sage, and snakeweed.

The mountain shrub type is generally characterized by steep slopes with rocky soils. The major subtypes within the resource area are curlleaf mountain mahogany and Rocky Mountain juniper. The understory is made up of Indian ricegrass, Idaho fescue, bluebunch wheatgrass, black sage, horsebrush, rabbit bitterbrush, winterfat, and other species with occasional limber pine and Douglas-fir trees.

The conifer type falls into two major categories. Douglas-fir is the largest category, making up 86 percent of the conifer type. The remainder is made up of lodgepole pine and other conifer species.

Waste comprises extremely steep slopes, lacking any vegetation, mine spoils, rock outcrops or any combination of these or similar factors.

There are no officially recognized threatened or endangered plant species within the resource area; however, one plant species, Lemhi penstemon,has been identified as potentially threatened or endangered in Montana.

WATER RESOURCES

The Dillon Resource Area is located in the Missouri River Hydrologic Region, upper Missouri River subbasin. Surface water is abundant, with many perennial streams supplying the major tributaries. Watershed topography ranges from steep mountain streams to flat bottom lands where streams generally follow a meandering course.

Five major river systems drain the resource area. These include the Red Rock, Beaverhead, Big Hole, Jefferson, and Madison. Outside the resource area,the Jefferson and Madison converge with the Gallatin to form the Missouri River.

Surface water quality in the area is generally excellent. Nonpoint pollution related to land use results in the most serious water quality problems in the Upper Missouri tributaries basin. Logging, overgrazing, stream hydrograph manipulation by reservoir storage, subdivision development, and irrigation are important factors that affect or may affect water quality in the area (Montana Department of Health and Environmental Sciences, Water Quality Bureau (MWQB) n.d.).

Accelerated and/or geologic erosion is causing excessive sediment concentrations in Muddy and Big Sheep Creeks.

WILDLIFE

Wildlife values within the resource area are exceptionally diverse due to the wide variety and interspersion of habitat types.

Mule deer are the most abundant big game animal in the resource area. Public lands serve as principal winter and spring habitats for significant portions of southwestern Montana's mule deer population. An estimated 7,640 to 9,235 mule deer utilize winter habitats which are wholly or partially on public lands; an estimated 258,350 acres of such habitat are found on public lands. The availability of winter forage, winter security cover, and spring fawning areas may be limiting factors influencing mule deer populations.

Snowmobiling and other winter recreation activities may cause undesirable winter and spring mule deer displacements, resulting in losses of otherwise suitable habitat and forage as well as depletion of critical fat reserves needed for survival and fetal development. Sustained winter recreation disturbance leads to declining fawning ratios. Twenty-three areas comprise crucial winter/spring mule deer habitats. The following are areas where uncontrolled ORV use would likely have substantial negative impacts on mule deer populations: Jake Canyon, Davey-Idaho-Jack Creeks, Charcoal-Dickie Hills-Jimmy New Creek, Soap Gulch-Camp Creek, Clark Canyon, Wall Creek, and Muddy Creek.

Summer, and particularly fall, off-road vehicle travel can also cause deer to leave preferred habitat areas. Mule deer populations in the Dutch Hollow area are being subjected to excessive motorized use which could displace these animals to less suitable habitat and eventually cause a reduction in deer numbers. Over-harvest of these animals is also a potential impact from excessive motorized access in this area.

Elk are also abundant in the Dillon Resource Area. Between 5,180 and 6,190 elk winter on areas that are at least partially on public lands. Approximately 113,950 acres of BLM-administered lands have been identified as winter elk range, with an additional 18,885 acres used during the spring calving season. Excessive winter disturbance causes increased elk movements, stress, and energy expenditures. This disturbance reduces available elk habitat, forage supplies, and results in animal energy reserves. Depletion of these critical fat reserves increases winter mortality while decreasing animal growth and calf production. Spring calf production may also be adversely affected by motorized vehicle use within calving areas. Elk wintering areas highly susceptible to these impacts and where impacts are anticipated to occur within the near future include Jake Canyon, Davey-Idaho-Jack Creeks, Charcoal-Dickie Hills-Jimmy New Creek, Soap Gulch, and the Wall Creek Game Range.

Public lands totaling 116,000 acres also provide summer/fall range for approximately 600 to 900 elk. Excessive fall hunter motorized travel causes these animals to move to more secure habitats and the early season movements cause premature expenditure of critical fat reserves used for winter survival. Areas where uncontrolled travel is causing significant elk disturbance or where disturbance is anticipated within the near future include Muddy Creek Basin, Clark Canyon, and Jake Canyon.

Public lands totaling 32,840 acres are presently being used as bighorn habitat. Approximately 65 to 70 bighorn sheep use public lands in the Camp Creek-Soap Gulch and the Maiden Rock areas and an estimated 20 to 30 sheep partially winter on public land in the Bad Luck Creek area. Hidden Pasture is scheduled for a bighorn sheep reintroduction in the near future.

The terrain used by bighorn in the Camp Creek-Soap Gulch area is comprised of large expanses of open, rolling topography which allows significant vehicle travel. Excessive hunting-related travel has caused increased stress on sheep in the area, contributing to a decline in populations.

Other big game populations found on public lands include antelope and moose. Public lands provide major habitat areas for antelope during all seasons of the year. An estimated 6,000 to 7,000 animals use summer areas which are partially located on public lands. The major identified moose concentrations are the Centennial Mountains where 44,000 acres are identified moose habitat.

The streams and rivers of southwestern Montana are nationally important fisheries. Of the 450 miles of perennial streams crossing public lands, approximately 150 miles contain viable fisheries. Several streams have been designated as "blue ribbon" trout waters in recognition of their high quality. The Big Hole, Beaverhead, Madison, Jefferson, Ruby, and Red Rock rivers flow past public lands on their passage to the Missouri River. The Sheep Creek fishery is currently being adversely impacted by excessive geologic erosion and stream sedimentation from the Muddy Creek Basin.

Other wildlife species common to the area include sage, blue, ruffed and spruce grouse; birds of prey such as golden and bald eagles, prairie falcons, and red-tailed hawks; waterfowl; and black bear.

The endangered Rocky Mountain wolf has been recorded in the area, primarily in the Tendoy Mountains and the nearby Continental Divide area. Grizzly bear make occasional use of public lands on the north slope of the Centennial Mountains.

WILDERNESS

In compliance with Section 603(a) of the Federal Land Policy and Management Act of 1976 (FLPMA), the public lands in the resource area have been initially reviewed as to their suitability for preservation as wilderness. Thirteen areas totaling 138,855 acres have been classified as Wilderness Study Areas (WSAs) and will be managed under the direction and constraints provided by "Interim Management Policy and Guidelines for Lands under Wilderness Review" (USDI 1979). Three of these areas (44,667 acres), Humbug Spires, Bear Trap Canyon, and the Centennial Mountains, are former primitive areas, reclassified as Instant Wilderness Study Areas (ISAs) by FLPMA. The Secretary of the Interior must report to the President as to the suitability or nonsuitability of all the Wilderness Study Areas for designation as wilderness by October 1991. The reports for Instant Wilderness Study Areas will be completed for the Humbug Spires and Bear Trap Canyon by July 1, 1980 and the Centennial Mountains report is due July, 1981.

RECREATION

Public lands in the resource area offer recreational opportunities of local, regional, and national importance. A wide variety of recreation opportunities is provided in settings ranging from large, unroaded areas to developed recreation sites.

Most of the recreational use recorded on public lands occurs as dispersed activities at undeveloped sites proximate to popular hunting and fishing areas. Undeveloped areas receiving extensive use include the many sites along the Big Hole and Madison rivers, Big Sheep Creek, Ruby Reservoir, Axolotl Lakes, and the East Fork Blacktail Creek. Three BLM camping areas along the Madison River provide the opportunity to recreate in a more developed setting.

Hunting and fishing are the primary recreation activities in terms of the amount of use recorded in the resource area. Activities such as camping, picnicking, hiking, sightseeing, and floatboating are important, and primarily pursued in conjunction with hunting and fishing.

Sport fishing on such nationally known streams as the Madison and Big Hole rivers and some of the lesser known streams such as the Beaverhead, Jefferson,and Ruby rivers attracts fishermen from all over the United States. Big game hunting for elk, and to a lesser extent, deer, is also considered nationally important.

Four-wheel driving solely for the exhilaration and excitement of operating one's vehicle under challenging conditions, or the participation in competitive events, is not an extremely popular activity pursued on public lands in the resource area. Participation in this activity on public lands does not appear to be growing nor is it anticipated to grow appreciably within the near future.

With the exception of some ORV use on private lands around Dillon and in the vicinity of the motocross track west of town, most vehicle travel is conducted in conjuction with participation in other activities and is confined to existing routes. This travel on existing routes during certain periods of the year contributes to localized erosion. This occurs in portions of the Axolotl Lakes, Muddy Creek Basin, East Fork Blacktail Creek, and Clark Canyon areas.

The largest amount of cross-country travel occurs during the hunting season as hunters travel to different hunting areas or retrieve downed game. This travel has become a concern in heavily hunted areas where over the years a vast vehicle travel network has developed. Vehicle travel is so extensive in the Muddy Creek, Dutch Hollow, Rock Creek, Soap Gulch, Camp Creek and Clark Canyon areas that wildlife disturbances have occurred and the quality of hunting is deteriorating.

Snowmobiling, in contrast to four-wheel cross-country travel, is quite popular and growing. The Montana Department of Fish, Wildlife, and Parks reports that Region 3 (which includes the Dillon Resource Area) records the second highest amount of snowmobiling in the state. Several organized events and a large amount of private use occurs on Forest Service lands south of Wise River and on the snowmobile trails in the Elkhorn area. Snowmobiling has been observed on a number of occasions on public lands in the Axolotl Lakes, Jerry-Johnson Creeks, Blacktail Ridge, the Sweetwater, Dyce Creek, Centennial Valley, and the Limekiln/Triangle Gulches areas. Snowmobiling in the area is anticipated to continue its rapid increase for the next few years in spite of soaring energy costs. Public lands are expected to experience a concurrent rise in snowmobile travel.

CULTURAL RESOURCES

Cultural resource inventories conducted within the resource area include a Class I inventory, various investigations completed during review of BLM proposals, and a 10 percent sample originally designed to fulfill Class II inventory criteria. Prehistoric and historic influences within the resource area are extensive, based on these inventories. Approximately 472 prehistoric or historic sites have been documented in the study area. Of these, 326 are known to be located at least partially on public lands with the condition, integrity, and significance of these sites yet to be sufficiently addressed. Predictions derived from the 10 percent sampling program indicate that the expected number of sites on public land could total approximately 1,900.

These inventories indicate that the resource area is an area of major contact between three archaeologically defined cultural regions: the Northwest Plains, the Interior Plateau, and the Great Basin. The earliest recorded human activity dates back to the Clovis culture (12,000 to 10,000 B.C.). Cultural materials indicative of human activity during latter cultural periods have been found through various surveys.

The historic period begins with the passage of Lewis and Clark through the area in 1805 and 1806. Most of the early historic activity in Montana centers within the resource area. Remains of old cabins, mining camps, stagecoach routes, and travelways are a few of the historic values indicative of this period.

Sites from these earlier historic periods listed on the National Register of Historic Places (NRHP) and found on or within close proximity to public lands include Bannack Historic District, Lemhi Pass, Beaverhead Rock, and the Virginia City Historic District. Sheep Creek Wickiup is currently being considered for inclusion as an NRHP and two archaeological districts appear to qualify as National Register of Historic Places; Everson Creek and Muddy Creek.

LIVESTOCK GRAZING

Livestock production is a major activity in the Dillon Resource Area and is conducted by 268 permittees operating on 404 separate allotments on public lands. The 268 licensed operators are permitted to harvest about 125,000 animal unit months (AUMs) annually from 954,626 acres of public land.

Under a proposed grazing program as outlined in the draft Mountain Foothills Grazing Environmental Impact Statement, the 268 operators would graze 467 allotments, totaling 914,000 acres. Under this plan 94,591 AUMs would be provided for livestock grazing annually, initially increasing to 129,241 AUMs in the year 2010. Fifty-one areas comprising 41,000 acres would remain ungrazed.

Cattle continue to be the predominant class of livestock grazed, but some sheep and a very few horses also graze public lands. Because livestock management practices vary widely among operators, seasons of use vary considerably, ranging from a few weeks or months to year-long grazing. Most operators have Forest Service allotments that furnish summer grazing, but have inadequate private land for spring grazing. Public lands are most important in providing this spring grazing.

Range improvements are an essential element in the overall management of any livestock grazing on public lands. Fences, cattleguards, spring developments, wells, pipelines, and vegetative manipulations are all necessary in order to obtain proper range utilization, livestock distribution, increased productivity, and adequate returns from livestock grazing. Additional improvements which would be needed if the proposed action in the Mountain Foothills Grazing EIS is implemented would include 193 miles of new fence, 260 miles of fence alteration, 23 cattleguards, 40 wells, 61 springs, 79 miles of pipeline, 189 stock tanks, and 9,414 acres of vegetative manipulation. Motor vehicles are used extensively in constructing and maintaining range developments.

MINERAL RESOURCES

Much of the study area was initially settled by miners, who beginning in 1862 found many rich mineral deposits; the area is dotted with sites where mining activity was extensive. Gold (both lode and placer) and silver were the earliest minerals discovered, but many other hardrock minerals have since been found in the area, including tungsten, iron, copper, lead, zinc, thorium, uranium, and talc.

The mineral industry has been extremely important in the economic development of southwestern Montana. Only in the years after World War II was there a decline in mining. More recently, the interest of major companies in talc and in hardrock exploration has caused mining activity to increase again. In fact, mineral interests account for the major income from taxes in three of the four counties in the resource area; Silver Bow, Deer Lodge, and Madison. More than a quarter of a million mining claims have been recorded in the area from 1862 to the present. About 400 to 600 new claims are located annually in each of the four counties.

Leasable minerals known to occur in the area are phosphate, oil shale, coal, and oil and gas. Geothermal resources also are found in the area. Of these commodities, only phosphate has been produced commercially.

Saleable minerals located in the area include riprap, building stone, sand and gravel, barrow material, and peat. About 100 permits (including free use permits) are issued annually by the Dillon Resource Area office.

FORESTRY

The Dillon Resource Area is forested on approximately 131,625 acres (14 percent of the area). The Dillon Management Framework Plan estimates that within prescribed multiple use technical and funding considerations, the resource area is capable of supporting on a sustained yield basis an annual timber harvest program of 4.4 million board feet. The present annual sales level is approximately 1.75 million board feet.

Most of the forested areas are dominated by Douglas-fir. Approximately 14 percent of forest consists of other coniferous species. Within the Centennial Mountains area, 17,400 acres of the 35,200 forested acres have lodgepole pine as dominant or codominant species. This area presently is experiencing a Mountain Pine bark beetle epidemic. Many forest areas are not available for intensive timber harvest because of soils, wildlife, wilderness study, or other multiple use restrictions. Approximately 125 free use firewood permits are issued annually, primarily confined to the western fringes of the Centennial Mountains and the southern edge of the Ruby Mountains.

Within areas replanted following timber harvest, off-road vehicle use can destroy tree seedlings, necessitating appropriate vehicle restrictions.

VISUAL RESOURCE ENVIRONMENT

The Dillon Resource Area is typical of the intermountain region, with broad plains of sagebrush grasslands and tree-lined valley streams surrounded by dominating mountain ranges. The vegetative cover changes from open grass and sage-covered plains to low rolling hills dotted with sagebrush and occasional patches of trees rising to more rugged forested slopes. Higher mountain tops are snow covered much of the year and support subalpine plant communities. The most scenic areas are the rugged mountains, river gorges, and sheltered river bottoms. Sagebrush areas and grasslands are generally of lesser scenic value.

The BLM Visual Resource Management System identifies landscape types and uses ratings of the contrast between the presently seen area and the same area following the impacting activity. Most riparian landscapes are considered to have below average visual values, upland areas average, and forested mountain areas above average scenic values.

SOCIO-ECONOMIC ENVIRONMENT

The economy of Montana began with development of its abundant natural resources and these primary industries continue as major sources of employment. Within Beaverhead and Madison counties, the major sources of employment are ranching and forestry activities, while mining and associated manufacturing processes are the primary employment sources in Deer Lodge and Silver Bow counties.

In Beaverhead County ranching employs an estimated 20 percent of the work force with retail trade (19 percent), education and welfare (14 percent), forest products (7 percent), and construction (7 percent) providing alternate employment opportunities. The dominant industry in Silver Bow County is mining, employing approximately 20 percent of the work force. A variety of employment sources including retail trade (19 percent), education and welfare (10 percent), health care (8 percent), and transportation/utilities (7 percent) provide other sources of employment opportunities.

In 1970 approximately 68 percent of the area's 71,000 residents lived in cities of more than 4,000 population with Butte contributing 35,000 of the four-county total. Contrary to national population trends, the area's urban sector has lost 13 percent (6,280) of its population while the rural segment has gained 5.1 percent (1,100 people) between 1960 and 1970. In 1980 the estimated four-county population will be 72,000 indicating the regional population decline has stabilized. Madison and Beaverhead counties are expected to experience significant population growth. These two counties presently have population densities of less than 1.5 people per square mile, while Deer Lodge and Silver Bow counties have considerably higher population densities. In general, Beaverhead and Madison counties are representative of rural intermountain areas with slower than average population growth, while Deer Lodge and Silver Bow populations have fluctuated with the economic state of the mining industry.

Consideration of the effects resource decisions have on lifestyles is a factor of growing importance in land management decisions. The lifestyle impacts variable is particularly important when public demands exceed resource capabilities to provide desired outputs. Three characteristic values can serve as focal points defining the differing lifestyle perspectives in this area between more traditional rural viewpoints and viewpoints reflecting regional and national interests. Many of the area's rural residents have a value system emphasizing the intrinsic value of landownership, a feeling of being close to the earth away from urban influences, and the fundamental values of honesty, integrity, and independence accompanied by a sense of belonging and roots in one's community. This value set is often accompanied by a distrust of large organizations, particularly governmental units which are viewed as threats to one's independence and whose motives are often suspect. Thus, the first focal issue is the skepticism with which any actions which change the real or perceived status quo are viewed. This resistance may not be to the effects of action but to the fact that some action is being taken bringing about "unnecessary" changes. The second point is the growing involvement and influence of persons outside the established local community on public decisions. The regional/national publics and "new" local residents often have values different from the traditional local perspectives. The third issue is the influx of new residents and subsequent shifts in local community values. Often these newer residents have values reflecting regional/national perspectives and they are likely to bring about changes in the community structure and values.

As seen in increased local concern over public land management decisions and the growing involvement of new residents in community affairs, area values and lifestyles may gradually be changing toward more regional perspectives, leading to a growing diversity of public demands and potential conflicts.

These conflicts may be particularly acute where groups feel land management decisions infringe on their established land use patterns. It is these user groups who have the greatest awareness of resource decisions and who will be most involved in decision-making processes. As resources are perceived to become increasingly scarce, the competition between these user groups will grow. Probably the two issues on which there is the greatest potential for conflicts between persons holding existing local values and persons with regional/national perspectives are wilderness lands allocations and management of off-road vehicles.

CHAPTER III
ENVIRONMENTAL IMPACTS

CHAPTER III

ENVIRONMENTAL IMPACTS

This chapter documents the environmental consequences of the proposed action and the two alternatives. The discussion will cover the significant environmental components presented in Chapter II, with the exception of the "Climate and Air Quality" and "Topography" components, where it has been determined that no significant impacts would occur. Each presentation will discuss, where identified, residual adverse effects, short-term use versus long-term productivity, and irreversible or irretrievable resource commitments. The analysis will discuss only the impacts associated with each alternative proposal. It will not consider the environmental effects of present vehicle restrictions. In most cases this analysis focuses primarily on the environmental consequences of restricting or not restricting vehicle use in areas susceptible to impacts because without additional information and the methodology to estimate the effects of various vehicle use patterns, it is highly speculative to identify specific areas as unconditionally suited for off-road vehicle use.

Few mitigating measures are presented since the proposed action and alternatives constitute a wide range of alternate ORV designations. The proposed action and alternatives themselves may be considered mitigating measures. The major mitigating measure identifed is continual monitoring and implementation of additional restrictions when needed. A second mitigating measure is individual authorizations for off-road vehicle travel in limited areas for approved resource management purposes (Appendix C).

GEOLOGY AND SOILS

A. Proposed Action

Implementing this proposal would prevent accelerated erosion due to uncontrolled motorized travel on 91,218 acres of public land. The long-term protection would be important in Muddy Creek basin and Clark Canyon since many of the soils in these two areas are very fragile and incapable of supporting extensive vehicle travel. In addition, there are approximately 80,000 acres of public land where an increase in the amount of motorized travel above that which is currently occurring would create excessive soil erosion and consequent stream sedimentation. Table 3.1 identifies these major soil associations which require special monitoring to insure that unacceptable soil losses do not occur.

Soil erosion resulting from motorized travel in the remaining open areas is generally expected to be immeasurable in any one area, but the cumulative effect over the entire resource area would be slightly increased soil compaction and erosion. As part of the monitoring program, these soils would be monitored and those areas experiencing unacceptable deterioration would receive corrective management.

B. No Action Alternative

Aside from the protection already provided to the soils of Axolotl Lake and East Fork Blacktail, no areas would be guaranteed long-term protection. Continued vehicle use on the sensitive soils of Muddy Creek basin and Clark Canyon would cause accelerated erosion in these two areas. The long-term consequences would be increased stream sedimentation, vegetation loss, and impaired fisheries productivity. It is also anticipated that increased soil losses would occur in some areas closer to population centers as rising energy costs force "four-wheel driving" enthusiasts to recreate closer to home.

Possible mitigating measures would be: (1) a continuing monitoring program, (2) reconstruction of those roads and trails experiencing degradation, and (3) the regulation of travel in identified sensitive areas as needed. These actions would require substantial funding increases, additional manpower and would, on a case-by-case basis, make this alternative comparable to the proposed action.

C. Limited Action Alternative

Limiting all motorized travel to designated routes would guarantee long term soil protection over the entire resource area, including the immediate protection required for the sensitive soils of Clark Canyon and Muddy Creek basin. Some long term erosion abatement would occur in those areas where cross-country travel occurs and on roads which are closed. However, the improvement would be slight when compared to the total amount of soil loss because motorized travel is not considered to be a major factor presently causing accelerated erosion. The soil erosion which would continue on open routes would be mitigated by reconstructing those routes which experience unacceptable erosion.

VEGETATION

A. Proposed Action

Long-term protection of vegetative cover from off-road vehicle travel would occur on 91,218 acres, where travel is restricted to designated routes, limited to authorized users, or prohibited entirely. This protection would be most important in preventing future vegetation losses in those areas where cross-country activity is extensive and expected to increase, i.e. Muddy Creek basin, Clark Canyon, Dutch Hollow, Camp Creek, and Soap Gulch. Substantial improvements in vegetative cover cannot be guaranteed in these areas, but minor long-term improvements would occur as closed routes revegetate. Although this slight improvement would

TABLE 3.1
SOILS WITH HIGH SENSITIVITY[1]

Soil Mapping Unit	Family Name	Approximate Acres*	Reason for Concern
154	Typic Cryopsamments sandy, mixed	200	Windblown sand dunes, severe wind erosion hazard, droughty
175	Typic Cryothents undifferentiated, shallow rock outcrops	800	Limited vegetation, droughty, outcrops of soft, weathered sediments similar to Missouri Breaks soils, severe erosion hazard, less than 20" to bedrock
223	Borollic Haplargids fine loamy, mixed	21,400	Clayey soils, compaction problems low permeability, higher runoff, clays limit moisture availability for plant growth
234	Borollic Paleargids fine, montmorillonitic	4,300	Clayey soil, compaction problems low permeability, higher runoff and erosion on unvegetated areas, clays limit moisture availability for plant growth
323	Argic Cryoborolls fine loamy, mixed	22,100	Clayey soils, compaction problems low permeability, higher runoff and erosion on unvegetated areas, clays limit moisture availability for plant growth
328	Aridic Argiborolls fine loamy, mixed	11,60	Clayey soils, compaction problems low permeability, higher runoff and erosion on unvegetated areas, clays limit moisture availability for plant growth
333	Argic Cryoborolls fine, montmorillontic	3,400	Clayey soils, compaction problems low permeability, higher runoff and erosion on unvegetated areas, clays limit moisture availability for plant growth
338	Ardic Argiborolls fine, montmorillontic	5,700	Clayey soils, compaction problems low permeability, higher runoff and erosion on unvegetated areas clays limit moisture availability for plant growth
376	Lithic Cryoborolls loamy skeletal, mixed	500	Droughty, less than 20" to bedrock, severe erosion hazard, rapid runoffs, one-third of unit is rock outcrop.
92	Association of Typic Cryoborolls (coarse loamy, mixed) and Typic Cryopsamments (mixed)	3,900	Windblown sand dunes, severe wind erosion hazard, droughty
93	Association of Aridic Argiborolls (fine montmorillonitic) and Ustic Torriorthents (clayey skeletal, montmorillonitic, frigid, shallow)		Clayey soils, compaction problems low permeability, high runoff and erosion, less than 20" to bedrock on parts of unit, droughty

[1] There are also various wet areas, saline spots, clay spots and gullies that would pose problems with ORV use. Soil locations are on aerial photographs on file in the Dillon Resource Area office.

not be considered significant when compared to the total production in any particular area, the end result would be continued soil protection and long-term reductions in soil losses.

Because vehicle travel is not currently or expected to be a major factor in reducing vegetative cover in the remaining area, only an insignificant loss of vegetation is anticipated in the future.

B. No Action

A gradual loss of vegetative cover would occur in Muddy Creek basin, Dutch Hollow, Clark Canyon, Soap Gulch, and Camp Creek as sustained cross-country travel developed additional roads. The overall decrease in vegetative cover would be minor, but very important in Muddy Creek basin and Clark Canyon. Any additional vegetative loss in these two areas would further accelerate erosion and cause additional stream sedimentation.

C. Limited Action Alternative

Maximum vegetative protection would be afforded with the implementation of this alternative. Since no vehicles, except snowmobiles, would be allowed to travel cross-country, future vegetation losses from ORV travel would be virtually nonexistent. The entire resource area, totaling 954,626 acres, would be protected.

WATER RESOURCES

A. Proposed Action

The proposed action would prevent stream sediment concentration increases due to indiscriminate motorized travel on 91,218 acres. Actual improvements cannot be projected in any one area, but the resultant protection would be important in lower Sheep and Muddy Creeks. The waters of these two streams exhibit excessive sediment concentrations, with erosion from a number of roadways at least partially contributing to the unacceptable sediment load. Eliminating even the minor contribution from these roadways and preventing further deterioration from all resource uses, including off-road travel, would improve water quality in these two streams.

With the exception of a few localized cases where minor sediment contributions would continue from the erosion of existing roads, water quality would remain good over the entire resource area.

Future water quality impairments would be detected through the resource area's water quality monitoring program and mitigated by instituting appropriate corrective action.

B. No Action Alternative

The effects on water quality are generally expected to be minimal in most areas since off-road vehicle travel is not nor expected to be a major contributor to stream sedimentation. Overall stream quality would remain good. The major exceptions would be Muddy, Lower Sheep, and Clark Canyon Creeks where the watersheds are very frail and incapable of supporting the indiscriminate travel the areas now receive. The waters in these streams would exhibit a long-term decline in water quality.

C. Limited Action Alternative

Implementation of this alternative would provide maximum protection and improvement in water quality. Since no unauthorized vehicles would be allowed to travel cross-country, the likelihood of increased stream sedimentation would be virtually eliminated. Stream sedimentation from erosion on open roads would continue.

WILDLIFE

A. Proposed Action

Instituting the proposed winter travel restrictions on 33,500 acres of elk and mule deer winter ranges would prevent current and future motorized disturbance from adversely affecting an estimated 900 elk and a large number of mule deer. Based upon the growing popularity of snowmobiling and observations of this activity in and around some of the big game wintering areas, each of the identified crucial big game ranges are likely to record a significant increase in winter recreational travel in the future. Instituting restrictions prior to this disturbance would prevent excessive big game movements, stress, and energy expenditures which serve to increase winter mortality and decrease calf/fawn survival. This protection would be most beneficial to elk populations since mule deer appear to respond less adversely to continued vehicle travel.

Although not occurring at this time, restricting public travel during May and June would prevent future excessive disturbance to an estimated 180 calving elk utilizing approximately 7,800 acres in the Sheser-Bear Creek-Bear Gulch, Gibbs Creek-Mill Gulch, and Blacktail Mountains areas.

Restrictions on motorized travel in Clark Canyon, Blacktail Ridge, Muddy Creek basin, Rock Creek and Dutch Hollow would provide considerable protection to summer/fall security habitats currently being utilized by an estimated 250 elk and a large number of deer. Reducing hunting related motorized disturbance would decrease big game movements resulting in better utilization of preferred habitats. The overall effect would be that animals would stay in these areas longer, thereby preventing premature expenditures of fat reserves necessary for winter survival and high calf/fawn production. Elk use would increase in the Rock Creek area where such use has been virtually eliminated. Restrictions might also increase the Muddy Creek basin/Tendoy Mountain elk herd.

Vehicle restrictions in bighorn sheep habitats would result in positive effects on current populations in the Bad Luck Creek and Camp Creek/Soap Gulch areas and allow considerable protection for introduced animals in the Hidden Pasture area. The proposed vehicle restrictions in the Camp Creek and Soap Gulch areas would benefit current sheep populations since excessive motorized vehicle travel during the hunting season is considered the principal factor causing lowered sheep productivity. Reducing vehicle disturbance as proposed would increase security habitat and possibly lead to population increases.

Efforts to re-establish native bighorn sheep have been initiated in Hidden Pasture and restricting vehicle travel as proposed would provide the opportunity to establish a self-sustaining population.

A slight long-term improvement in fisheries might be expected in Sheep Creek because of reduced erosion and stream sedimentation in the Muddy Creek Basin. Actual quantifications cannot be projected because the amount of stream sedimentation attributable to motorized travel is unknown.

B. No Action Alternative

The no action alternative could result in long-term big game displacement on about 33,500 acres of crucial winter range. This would constitute a loss of big game winter range, resulting in a reduced carrying capacity for elk and fewer animals. The degree of loss cannot be estimated because variables such as the amount of security cover, amount and type of winter travel, and forage availability make quantification very difficult. Depending on the situation, elk losses could be high.

Similar results would be expected on mule deer winter ranges, but because mule deer are less sensitive to vehicle disturbance, total effects would be less. Complete loss of habitat would not be expected.

Continued disturbance of elk summer-fall security habitats would further reduce the value of elk habitat and cause elk to move to more secure, inaccessible areas. A long-term decrease in carrying capacity and therefore elk numbers could occur. Elk displacement would further reduce critical fat reserves necessary for winter survival and calf production.

Although not occurring at this time, excessive human disturbance during spring elk calving could force the current population of 180 cows to calve on less suitable habitat. Impaired calf production would be expected.

Bighorn sheep numbers would continue a long-term decline in the Camp Creek/Soap Gulch areas and no protection would be guaranteed to the introduced herds in Hidden Pasture.

A long-term decrease in the Sheep Creek fishery could be expected as additional motorized travel in Muddy Creek Basin accelerates vegetation loss, erosion and stream sedimentation.

C. Limited Action Alternative

Maximum protection would be provided to deer and elk. An estimated 33,500 acres of elk winter range, supporting approximately 750 elk would receive long-term protection as discussed in the proposed action. Maintaining these habitats free of motorized disturbance would increase the effective carrying capacity and possibly lead to a long-term increase in elk numbers.

Elk calving habitats would continue to be protected as in the proposed action. Restricting vehicle travel to existing routes in the remaining calving areas would provide added protection to these animals as well. The entire 19,000 acres of elk calving habitat on public lands would receive some form of protection.

Although vehicle disturbance is not currently identified as a problem or anticipated to be one, the long-term protection of sage grouse habitats would be guaranteed. The absence of cross-country vehicle travel would prevent any existing or future sage grouse population declines through habitat impairment.

This alternative would provide the maximum protection to fisheries resources because of the long-term maintenance of present conditions. The identical effects would be expected in the Sheep Creek fishery as presented in the proposed action.

WILDERNESS

A. Proposed Action

The Wilderness Study Areas' wilderness suitability would be maintained.

B. No Action Alternative

The Wilderness Study Areas' wilderness suitability would be maintained.

C. Limited Action Alternative

The Wilderness Study Areas' wilderness suitability would be maintained.

RECREATION

A. Proposed Action

Implementing the proposed action would primarily affect five types of recreational pursuits: (1) snowmobiling; (2) hunting; (3) wildlife observations; (4) fishing; and (5) nonmotorized recreation.

Snowmobiling would be the main type of off-road motorized recreational activity affected since recreational four-wheel driving and motorcycling are not widely popular activities pursued on public lands within the resource area. A total of 78,896 acres (8 percent) would be restricted from over snow travel under this proposed action with much of this acreage comprising areas unsuited to snow travel. About 824,600 acres (86 percent) would be designated as open to this type of recreational activity.

Fall hunting-related motorized travel would be restricted to designated routes on 53,952 acres (6 percent) and prohibited on 32,726 acres (3 percent) by the proposed action. Areas which would be most affected include Muddy Creek Basin, Hidden Pasture, Clark Canyon, Dutch Hollow, Camp Creek, Soap Gulch, and portions of Blacktail Ridge. In many of these areas, a number of routes have been designated to provide adequate hunter access while protecting big game fall security habitats. For example, in the Muddy Creek area no public lands would be more than 1.5 miles from a designated route during the fall.

The action would be a negative impact to some hunters because restrictions would prevent them from hunting these areas using cross-country vehicles as they have in past seasons. Hunters would have to walk or ride on horseback more and retrieve game without the use of motorized vehicles. Those unwilling or unable to do so would have to hunt in the 739,040 acres (77 percent) of the resource area open to fall cross-country vehicle travel.

For those hunters who employ walking as the principal hunting mode, the benefits derived from reducing motorized travel in the limited areas would be substantial. The reduced frequency of contact with other hunters and motorized vehicles would improve their hunting experience.

In addition, preventing disruptions to fall security habitats would reduce the likelihood of unnatural early hunting season big game movements. Elk research in areas similar to the proposed restricted areas has shown that reducing vehicle disturbance during hunting season increases the capability of an area to hold elk increases the number of elk seen, and increases hunter success. Elk populations in Muddy Creek Basin, Clark Canyon, and Rock Creek would have larger effective fall security habitats, thus providing a longer hunting season in these areas. In all remaining proposed areas where travel is restricted to designated routes, elk populations and, therefore, hunting opportunities would be maintained.

Mule deer and bighorn sheep would also experience similar results in the Dutch Hollow and Soap Gulch/Camp Creek areas. Both species would benefit from the proposed action in the Soap Gulch/Camp Creek areas with probable increases in future huntable bighorn sheep populations. Reducing motorized vehicle disturbance of mule deer in the Dutch Hollow area would maintain security values and prevent early season movements to more inaccessible areas thus providing a longer effective hunting season.

To the extent that the Sheep Creek fishery is affected by accelerated sedimentation, fishing opportunities due to off-road travel in Big Sheep Creek would be maintained at their current condition. Any future improvements in water quality would result in a concurrent improvement in fishing opportunities.

Opportunities for nonmotorized recreational activities such as cross-country skiing, hiking, backpacking, wildlife observation, etc., would be expanded. The proposed action would make a total of 19,447 additional acres available exclusively for nonmotorized uses during the winter and an additional 76,731 acres where vehicle travel would be restricted to designated routes during portions of the year.

B. No Action Alternative

Existing snowmobile prohibitions would remain in effect on 81,810 acres in the Centennial Mountain, Dyce Creek, Muddy Creek Basin, Humbug Spires, Bear Trap Canyon, and East Fork Blacktail areas, as well as on the Moose Creek road and MacLean Creek area. About 872,816 acres would remain open to winter motorized travel.

Hunting-related motorized travel would be restricted to designated routes on about 108,426 acres (11 percent) and not allowed on 48,326 acres (5 percent). Hunters would be allowed unrestricted access on 84 percent of the public lands in the resource area. Those who employ motorized travel as their primary mode of hunting would experience little, if any, changes to their hunting opportunities. Game retrieval would be facilitated by the general absence of restrictions. Elk hunting opportunities would be expected to decline in Clark Canyon and Muddy Creek basin as excessive vehicle disturbance on fall security ranges and crucial winter habitat cause a decrease in elk numbers. Any long-term disturbance in Davey Creek-Idaho Jack or Blacktail Ridge would also decrease elk hunting opportunities by decreasing elk numbers. Mule deer hunting opportunties would decline in the Dutch Hollow area and bighorn sheep hunting opportunities would continue to deteriorate in the Camp Creek/Soap Gulch areas.

Nonmotorized recreational opportunities would be available on 48,326 acres year long with additional opportunities provided on 108,426 acres in identified wilderness study areas where travel is restricted to designated routes. Approximately 81,810 acres (8 percent) would be available exclusively for nonmotorized winter recreational pursuits.

Under this alternative, increases in uncontrolled vehicle travel would slightly accelerate erosion and stream sedimentation leading to possibly very small declines in sport fishing opportunities resource area-wide. A long-term, possibly significant decline in fishing opportunities would be expected in Big Sheep Creek.

C. Limited Action Alternative

A total of 129,978 acres (14 percent) would be restricted from winter motorized travel. Crucial big game winter ranges susceptible to vehicle disturbance would be protected. The long-term result would be increases in animal numbers, with an accompanying increase in opportunities to hunt and observe game.

Cross-country motorized travel would not be allowed for any recreational activity; however, the principal effects would be felt by hunters. Retrieval of downed game would be severely hampered, and those not desiring or unable to walk or ride horseback to their desired hunting areas would have to hunt elsewhere. The impacts of increased travel on other federal, state, or private lands could be significant.

CULTURAL RESOURCES

Cultural resource sites are nonrenewable and readily damaged, subject to a variety of deteriorating factors. Sites are best maintained in an undisturbed condition by protecting the quality of the environment.

Three hundred twenty-six sites are known to occur in the resource area on public lands. In all probability, many more sites exist which have not yet been identified. Most of these sites benefit from programs designed to enhance environmental quality by reducing erosion and runoff, and improving vegetative cover. The figures given under each alternative are based on existing inventory and represent only the presently known site data base.

A. Proposed Action

This action would benefit 132 sites located within areas with motor vehicle travel restrictions. Sites outside these areas would undergo ongoing deteriorating factors at approximately the present rate. The sites within the restricted areas would experience a decreased rate of deterioration due to the restricted vehicle traffic. Both short-term and long-term preservation of these sites would be enhanced.

B. No Action Alternative

One hundred and sixteen identified sites located within areas having existing motor vehicle travel restrictions would be benefitted under this alternative. Short-term and long-term preservation of these sites would be enhanced. Sites outside the restricted areas would continue to undergo deterioration at the present rate with possible accelerated deterioration in areas of significant motorized activity.

C. Limited Action Alternative

Under this alternative, the entire resource area would be placed under restrictions; all sites would be affected to a certain extent. While sites in areas with presently existing vehicle restrictions would benefit some sites located in designated vehicle-ways may receive intensified use with resulting impacts. The number of deteriorating sites requiring mitigation could only be determined by extensive inventory.

Sites outside designated ways and not otherwise under seasonal restrictions will continue to deteriorate at approximately the on-going rate.

LIVESTOCK GRAZING

A. Proposed Action

This alternative would designate 76,904 and 70,624 acres of public lands as limited to off-road vehicle travel during the spring and summer, respectively. Approximately 756,912 acres (79 percent) would be open to off-road vehicle use during all or parts of the spring, summer, or fall seasons, while 76,737 additional acres would be limited during the winter by the proposed action.

Within those areas designated as limited, existing range operators would continue to use motor vehicles off-roads as determined necessary for their operations. Special use authorizations would be issued by the Resource Area Manager to the range operators following a review of their travel needs and the potential resource impacts. Appendix C identifies the method to be used in approving or denying these authorizations.

Table 3.2 presents a summary of identified allotments partially or wholly within areas that would be managed as limited under the proposed action. Allotments within existing restricted areas, WSAs, and ISAs are not included unless they are considered under the proposed action.

TABLE 3.2

RANGE ALLOTMENTS WITH PROPOSED VEHICLE RESTRICTIONS ON ALL OR PORTIONS OF THE ALLOTMENT

Area Name	Size (acres)	Vehicle Use Seasons (Restricted)	Allotment Nos.
1. Bad Luck Creek	640	Year-round Authorized users only	0721 0104
2. Upper Clark Canyon	2,280	Year-round Authorized users only	0002 0003 0013
4 Humbug Spires Periphery	11,174	Designated routes only Spring, summer, fall Limited winter	0316 0303
5. Bear Trap Canyon	4,015	Year-round Authorized users only	0393 0401
7. Davey Creek-Idaho Jack	12,980	Winter	0482,0483 0490,0497 0491 0499
8. Dickie-Charcoal Gulch	12,825	Winter	0318 0339 0340
9. Jake Canyon	7,180	Designated routes only Spring, summer, fall Limited winter	0147 0013 0178
10. Wall Creek Game Range	315	Limited winter	--
11. Soap Gulch North	4,881	Designated routes only-fall Limited winter	0303 0308,0309
12. Rock Creek	1,390	Limited spring, summer, fall Snowmobiles permitted winter	0721 0104
13. Dyce Creek	11,969	Limited winter	0028 0034 0037 0609 0618 0751
14. Soap Gulch South	16,868	Designated routes only fall	0308 0309 0324
15. Shesser Gulch-Bear Creek	4,960	Limited spring	0145 0626,0627 0018 0036 0111

TABLE 3.2 (Continued)

Area Name	Size (acres)	Vehicle Use Seasons (Restricted)	Allotment Nos.
16. Gibbs Cr.-Bear Gulch	1,320	Limited spring	0456 0475 0484,0489 0526 0669
17. Virginia City Municipal Watershed	320	Limited year-round, Snowmobiles permitted winter	0477 0478 0481
18. Sheridan Municipal Watershed	505	Limited year-round Snowmobiles permitted winter	0477 0478 0481
19. Ruby Mountains	26,357	Limited year-round Snowmobiles permitted winter	0463 0479 0492 0527 0530
20. Dillon Municipal Watershed	5,094	Limited year-round Snowmobiles permitted winter	0005,0006 0197
26. Axolotl Lakes (Existing Restricted Area)	7,488	Limited year-round Snowmobiles permitted winter	0473 0485 0490 0491 0497 0672
29. Dutch Hollow	1,800	Limited year-round	0029
30. Blacktail Ridge	13,960	Limited year-round Snowmobiles permitted winter	0013 0117,0116 0147 0170 0188
32. Muddy Creek	15,335	Limited year-round	0039 0699,0700
33. Hidden Pasture	6,625	Limited year-round	0699,0700
34. Bannack	305	Limited year-round	0015
35. Humbug Spires	7,041	Closed yearlong	0316 0303
36. Bear Trap Tack-ons	1,155	Limited year-round Snowmobiles permitted winter	0393 0401

Since some operators would be expected to consult with the BLM on their planned vehicle use, additional operator effort and time will be required. Because this plan is a means of protecting multiple use resources, affected range operators may not be able to access their allotments as early as desired, and their use of motor vehicles in range operations may be curtailed in order to protect watershed, soil, wildlife, range and recreation values. Installation and maintenance of significant range improvements and other necessary uses requiring motor vehicles will be examined on a case-by-case basis with the possibility of some restrictions (see Appendix C).

B. No Action Alternative

This involves the designation of 784,927 acres as open and continuing travel restrictions presently in effect on 169,699 acres. There would be no impacts on grazing beyond those presently in effect. This alternative would not restrict any additional range operators and would involve only those operators having present vehicle restrictions. There would be possible minor reductions in vegetative cover from ORV vehicle use on "open" areas.

C. Limited Alternative

This alternative proposes that the entire resource area be designated limited (944,724 acres) or closed (9,902 acres), requiring authorizations for all off-road vehicle travel for range purposes. There would be substantial impacts on range operators necessitating large amounts of time and effort in the issuance of off-road travel authorizations. This alternative and its philosophy would probably produce a very restrictive set of justifications for authorizing off-road travel thus substantially increasing grazing operation costs.

MINERALS

A. Proposed Action

A recent Solicitor General's opinion on the enforceability of off-road vehicle designations indicates that mining-related motorized vehicle use would be subject to the proposed travel restrictions on 123,615 acres, as well as the existing restrictions. Motorized travel contrary to the specific restrictions in force in a particular area must receive prior authorization. This procedure would result in some control over mining activities with respect to off-road vehicle uses which do not conform to proposed ORV restrictions. Requests for authorization would have to be evaluated on a case-by-case basis (see Appendix C); therefore, the total impacts to minerals development cannot be predicted. Any mining-related motorized travel which conforms to existing restrictions on the 713,948 acres designated open would not be affected. Specific areas where mining-related activities would be most affected include Camp Creek, Soap Gulch, Ruby Mountains, and the Argenta area.

B. No Action

Motorized travel authorization would be required on 169,699 acres if such travel did not conform to existing off-road vehicle designations. About 138,222 acres of this total would be subject to approval under the interim wilderness policy and management guidelines.

C. Limited Action Alternative

All mining-related motorized travel contrary to the specific restrictions in a particular area would require prior approval. This action would result in a great deal of control over mining activities where vehicle travel is not on existing travel routes.

Any mining activity which requires cross-country travel would have to be authorized. This could potentially place severe limitations on exploration and prospecting as well as result in an enormous administrative workload.

FORESTRY

A. Proposed Action

Because timber harvest activities are authorized management activities, this plan would have little overall effect on the timber sales program. The time of year cutting could take place, particularly in fall, winter and spring wildlife protection areas, may be reduced to protect these resources from adverse vehicle use impacts. There would be noticeable impacts on firewood cutting in areas where vehicles are restricted to designated roads, thus reducing use in restricted areas or shifting the location of firewood collection to unrestricted areas.

B. No Action Alternative

The only restricted area under this alternative that currently is available for timber harvest is the Dyce Creek area. Within existing restricted areas, firewood gathering would be limited to areas adjacent to designated routes. Because most firewood is gathered next to one's vehicle, limiting vehicles to designated routes would only slightly reduce the available supply of firewood in restricted areas.

C. Limited Action Alternative

This alternative would classify the entire resource area as limited, with all travel on designated ways. Forest harvest activities would be a legitimate authorized use so there would be little or no impact on the authorized timber sales program due solely to off-road vehicle restrictions. Vehicle travel associated with firewood gathering would be restricted to designated roads, reducing opportunities for such gathering.

VISUAL RESOURCE IMPACTS

The BLM Visual Resource Management System identifies and measures the contrast between an area that has not been acted upon and areas that have. This provides measures of the visibility of changes in the landscape. Changes that are irregular or cannot be discerned from the surrounding landscape are rated as having low levels of visual impact, while changes in the visual field that are highly noticeable regardless of whether they contain positive or negative scenic values are considered to have high visual contrast.

As is often the case with off-road vehicles, changes that are subtle but extensive will not result in high visual contrast ratings. Only activities significantly altering specific sites result in high contrast ratings.

Using a subjective set of scenic values, Table 3.3 presents the effects of the various alternatives. For example, off-road vehicle use causing rutted trails or disturbed mud holes would have negative scenic values while revegetation of such tracks would have positive scenic values.

TABLE 3.3

ORV Visual Resource Evaluation Alternative

	A Proposed Action	B No Action	C Limited Alternative
Riparian Areas	—	—	+
Upland/Foothills	+	0	+
Mountain/Forested	+	0	+

+ = slight improvement in scenic values
0 = little or no change in scenic value
— = slight reduction in scenic values

Again, the above evaluation is an estimation evaluation of the overall area-wide average impacts under each of the alternatives. Impacts in any particular area may differ substantially from this overall average.

SOCIO-ECONOMIC EVALUATION

A. Proposed Action

This proposed action would designate 119,104 acres as "limited" or "closed" in addition to the present 123,618 acres, and designate 711,904 acres as open to motor vehicle uses. This proposal would reduce potential increases in future availability of public lands for recreation vehicle uses by an average of 16 percent as averaged across the four seasons of the year. Presently, there is little vehicle use occurring on much of the 119,104 acres subject to some type of proposed restriction under this proposal. The majority of off-road vehicle use on BLM-administered areas occurs on the 712,000 acres that would be designated "open."

Because ORV recreation use is often auxiliary to other recreation activities, such as camping, fishing, and hunting, there are no reliable estimates of off-road vehicle use in the study area or the economic effects of such use. The proposed action would maintain or improve expected elk and deer populations resulting in the continuing production of wildlife and associated economic benefits (Table 3.4).

TABLE 3.4
HUNTING VALUES

Animal	$/Hunter Day	$/Harvested Animal	Estimated Number of Wintering Animals in Limited Winter Areas
Elk	43	1,858	750
Deer	24	170	1,060
Bighorn Sheep	139	6,464	80

Because recreational off-road vehicle use is a discretionary activity individuals make to further their desired lifestyles, the perceived impact of particular restrictions on recreation vehicle users' lifestyles may be substantial. In many of the proposed limited areas there is presently little or no off-road recreation vehicle use occurring. However, the symbolic effect of the proposed action may have a large impact on individuals' perceived lifestyles. Some area recreationists may view this proposal as a further erosion of their rights to use public lands. These people may consider this plan as another example of regional/national publics influencing management of public lands that ought to be managed primarily to benefit local users.

In the short term, several user groups may be adversely impacted by this proposal. Off-road recreation vehicle use would be limited on 242,722 acres, while grazing operators would need to work with managers in using vehicles in these restricted areas, thus increasing operator costs. In the long term, this proposal will maintain the flow of wildlife, water, soil, and recreation benefits. This alternative will also help assure a balanced variety of recreation experiences are provided on BLM-managed lands.

B. No Action Alternative

This alternative would continue the existing limitations on 123,618 acres. This alternative would designate approximately 711,904 acres (75 percent of the resource area) as open to ORV use.

Because some residents of the area feel they are threatened by unnecessary federal regulation, this alternative is possibly most compatible with this local value and is the absolute legal minimum necessary to meet ORV management requirements. This alternative would constitute an abandonment of the Bureau's responsibility for stewardship of the public lands, is contrary to the Dillon Management Framework Plan, and would be unresponsive to other local needs as well as regional/national publics.

The short-term impacts would include declines in wildlife benefits with a continuing growth in ORV use while the long-term effects would include continuing demands by regional/national publics to control or reduce the impacts associated with off-road recreational vehicle use as well as reduced land benefits.

C. Limited Alternative

This alternative would restrict wheeled vehicle use to designated vehicle ways on 954,626 acres, and would close 141,265 acres of elk winter range to all snowmobile use. This alternative would have no designated areas open specifically for wheeled off-road recreation.

There would be a very large impact on present off-road vehicle uses and associated enterprises. Slight declines in local ORV sales would be likely. There would be positive effects on elk and deer populations, thus producing unknown additional wildlife benefits. This alternative would create a substantial negative local reaction and would be considered excessive regulation by most regional and national publics.

The short-term impacts would fall primarily on recreational users, range operators, and associated industries. There would be moderate increases in wildlife populations. The long-term result would be to substantially reduce off-road vehicle recreation, timber, grazing and mineral uses, with beneficial effects on wildlife, watershed, and nonmotorized recreation uses.

CHAPTER IV

CONSULTATION AND COORDINATION

CHAPTER 1V

CONSULTATION AND COORDINATION

Initial public response to the proposed travel restrictions was solicited throughout the formulation of the Dillon MFP. Approximately 122 comments resulting from the distribution of 200 MFP brochures at five open houses and the mailing of 930 public comment brochures were received. A number of comments were specifically directed towards the travel restrictions put forth in the MFP. A concensus was that restrictions should not be made without excellent reason and that the BLM must be prepared to justify each restriction. With the exception of a few isolated instances, there was only limited information either in support of or in opposition to proposed travel restrictions. This was probably due, at least in part, to the generalized nature of the proposals as presented.

The most apparent conclusion from the responses received is that the BLM must seek full public participation in any proposed travel restriction before it becomes implemented.

Recognizing this, a news release was distributed in April 1980 discussing BLM's preparation of this off-road vehicle plan and that public response would be solicited in June. Almost 1,200 mailings have been sent to interested individuals and groups asking if they would like to review the draft Environmental Assessment. Those expressing an interest are being sent this draft EAR and travel map with the BLM's initial proposals. Appendix D presents a list of major organizations which have been asked to provide review comments.

Public meetings will be scheduled throughout July to receive public response. These comments will be incorporated into the final EAR and serve as a basis for formulating the final decision.

APPENDIX A

EXECUTIVE ORDER 11644
EXECUTIVE ORDER 11989

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EXECUTIVE ORDER 11644
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THE PRESIDENT

EXECUTIVE ORDER 11644

Use of Off-Road Vehicles on the Public Lands

An estimated 5 million off-road recreational vehicles—motorcycles, minibikes, trail bikes, snowmobiles, dune-buggies, all-terrain vehicles, and others--are in use in the United States today, and their popularity continues to increase rapidly. The widespread use of such vehicles on the public lands--often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity--has demonstrated the need for a unified Federal policy toward the use of such vehicles on the public lands.

NOW, THEREFORE, by virtue of the authority vested in me as President ofthe United States by Constitution of the United States and in furtherance of the purpose and policy of the National Environmental Policy Act of 1969 (42 U.S.C. 4321), it is hereby ordered as follows:

Section 1. Purpose. It is the purpose of this order to establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.

Section 2. Definition. As used in this order, the term:

(1) "public lands" means (A) all lands under the custody and control of theSecretary of the Interior and the Secretary of Agriculture, except Indian lands, (B) lands under the custody and control of the Tennessee Valley Authority that are situated in western Kentucky and Tennessee and are designated as "Land Between the Lakes," and (C) lands under the custody and control of the Secretary of Defense;

(2) "respective agency head" means the Secretary of Agriculture, and the Board of Directors on the Tennessee Valley Authority, with respect to public lands under the custody and control of each;

(3) "off-road vehicle" means any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any military, fire, emergency, or law enforcement vehicle when used for emergency purposes, and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract; and (4) "official use" means use by an employee, agent, or designated representative of the Federal Government or one of its contractors in the course of his employment, agency, or representation.

Sec. 3. Zones of Use. (a) Each respective agency head shall develop and issue regulations and administrative instructions, within six months of the date of this order, to provide for administrative designation of the specific areas and trails on public lands on which the use of off-road vehicles may be permitted, and areas in which the use of off-road vehicles may not be permitted, and areas in which such designation of all public lands shall be completed. Those regulations shall direct that the designation of such areas and trails will be based upon the protection of the resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various uses of those lands. The regulations shall further require that the designation of such areas and trails shall be in accordance with the following:

(1) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.

(2) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.

(3) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(4) Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas. Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

(b) The respective agency head shall ensure adequate opportunity for public participation in the promulgation of such regulations and in the designation of areas and trails under this section.

(c) The limitations on off-road vehicle use imposed under this section shall not apply to official use.

Sec. 4. Operating Conditions. Each respective agency head shall develop and publish, within one year of the date of this order, regulations prescribing operating conditions for off-road vehicles on the public lands. These regulations shall be directed at protecting resource values, preserving public health, safety, and welfare, and minimizing use conflicts.

Sec. 5. Public Information. The respective agency head shall ensure that areas and trails where off-road vehicle use is permitted are well marked and shall provide for the publication and distribution of information, including maps, describing such areas and trails and explaining the conditions on vehicle use. He shall seek cooperation of relevant State agencies in the dissemination of this information.

Sec. 6. Enforcement. The respective agency head shall, where authorized by law, prescribe appropriate penalties for violation of regulations adopted pursuant to this order, and shall establish procedures for the enforcement of those regulations. To the extent permitted by law, he may enter into agreements with State or local governmental agencies for cooperative enforcement of laws and regulations relating to off-road vehicle use.

Sec. 7. Consultation. Before issuing the regulations or administrative instructions required by this order or designating areas or trails as required by this order and those regulations and administrative instructions, the Secretary of the Interior shall, as appropriate, consult with the Atomic Energy Commission.

Sec. 8. Monitoring of Effects and Revision. (a) The respective agency head shall monitor the effects of the use of off-road vehicles on lands under their jurisdiction. On the basis of the information gathered, they shall from time to time amend or rescind designations of areas or other actions taken pursuant to this order as necessary to further the policy of this order. (b) The Council on Environmental Quality shall maintain a continuing review of the implementation of this order.

THE PRESIDENT

May 24, 1977

Executive Order 11989

OFF-ROAD VEHICLES ON PUBLIC LANDS

By virtue of the authority vested in me by the Constitution and statutes of the United States of America, and as President of the United States of America, in order to clarify agency authority to define zones of use by off-road vehicles on public lands, in furtherance of the National Environmental Policy Act of 1969, as amended (42 U.S.C. et seq.), Executive Order No. 11644 of February 8, 1977, is hereby amended as follows:

Section 1. Clause (B) of Section 2(3) of Exective Order No. 11644, setting forth an exclusion from the definition of off-road vehicles, is amended to read "(B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and" . . .

Sec. 2. Add the following new Section to Executive Order No. 11644:

"Sec. 9. Special Protection of the Public Lands.
(a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence. (b) Each respective agency head is authorized to adopt the policy that portions of the public lands within his jurisdiction shall be closed to use by off-road vehicles except those areas or trails which are suitable and specifically designated as open to such use pursuant to Section 3 of this Order."

APPENDIX B

DETAILED RATIONALE FOR PROPOSED TRAVEL RESTRICTIONS

APPENDIX B

DETAILED RATIONALE FOR PROPOSED TRAVEL RESTRICTIONS

The following discussion identifies the type of designation proposed for all areas of the public land within the resource area and a brief rationale for proposing the type of designation.

A. Motorized Travel Limited to Authorized Users Only

Unit 1 - Bad Luck Creek — This area comprises a portion of the winter habitat for 20 to 30 bighorn sheep and is intensively utilized by wintering and calving elk. The tract is currently roadless and comprises very steep and rugged terrain. Vehicle traffic would greatly reduce the suitability of this area for the current sheep herd and jeopardize the possible future recovery of this depressed bighorn population. Wintering and calving elk and mule deer would also be adversely affected by vehicle traffic from disturbance to security habitat. Instituting the proposed vehicle restriction would ensure continued protection for these wildlife species.

Unit 2 - Clark Canyon — This area comprises preferred summer/fall security habitat for up to 60 elk and a large number of deer, lies adjacent to an elk wintering area, and is highly susceptible to severe erosion. Mass wasting, slumping, and wet, saturated soils are prevalent. Uncontrolled vehicle travel associated with the heavy hunting pressure (455 trips in 1978) reduces the already limited timbered security cover, thus causing early hunting season elk movements to more secure habitats. Restrictions against vehicle use will enhance the security value of the elk habitat, resulting in less elk movement and enhanced hunting quality. Further, the likelihood of increased erosion above that which is naturally occurring would be reduced.

Unit 33 - Hidden Pasture — This area is the location of a bighorn sheep re-establishment project. The area is expected to support a population of 100 to 125 bighorn in the future. Bighorn sheep are endemic to the area and the proposed vehicle restrictions would protect areas believed to be the most productive and potentially suitable bighorn habitat in the Hidden Pasture-Dixon Mountain area. This unit includes two water sources which are expected to be utilized by bighorn. Bighorn sheep are generally intolerant of vehicle use when it occurs at higher elevations within preferred ridges and open slopes. The two existing jeep routes in the area jeopardize security values of bighorn habitat and reduce the suitability of the only two water sources. Successful re-establishment of this prized native species may require a minimization of habitat conflicts until habitat use becomes established and the population can become self sustaining.

Winter use by motorized vehicles on big game winter ranges can cause a loss of security cover and undesirable game movements. The resultant impacts can include the loss of otherwise suitable fat reserves necessary for winter survival and fetal growth. Elk are particularly vulnerable to these affects from uncontrolled vehicle travel on winter ranges. The public lands proposed for seasonal restrictions and the adjoining private, state, and federal lands comprise crucial winter habitat for a large number of elk and deer. Implementing winter travel restrictions on these areas, as proposed, would ensure the continued availability of suitable winter forage and prevent undesirable big game movements.

B. No Motorized Travel Permitted From December 1 to May 1

Unit 7 - Davey Creek-Idaho Jack
Unit 8 - Dickie Hills - Charcoal Gulch
Unit 10 - Wall Creek — This area adjoins the Wall Creek Game Range, administered by the Montana Department of Fish, Wildlife, and Parks (MDFW&P). The Game Range in combination with contiguous public lands, provides winter habitat for 600 to 700 elk and 200 to 300 mule deer. The MDFW&P closes their lands from December 1 to May 1 in order to prevent human disturbance from adversely affecting these animals. Instituting similar controls on public lands would prevent undesirable big game movements and loss of otherwise suitable habitat.

C. No Motorized Travel Permitted from May 1 to July 1

Unit 15 - Sheeser-Bear Creek - Bear Gulch
Unit 16 - Gibbs Creek-Mill Gulch — Motorized vehicle disturbance on a sustained basis in intensively used elk calving areas during May and June can force elk to less suitable habitat, thus resulting in impaired calf survival. The public lands proposed for seasonal restrictions in this document support a moderate number of calving cows, and restricting access during the proposed period would prevent unnecessary disturbance.

D. All Motorized Travel Restricted to Designated Routes Yearlong Except Over-the-Snow Vehicles Operating from December 1 to May 1

Unit 17 - Virginia City Municipal Watershed
Unit 18 - Sheridan Municipal Watershed
Unit 20 - Dillon Municipal Watershed — These areas comprise a portion of the watersheds which supply municipal water for the towns of Virginia City, Sheridan, and Dillon. Restricting vehicle travel to the designated routes would prevent unacceptable watershed erosion and resultant high sediment concentrations in municipal reservoirs, streams, and springs. This not only provides added protection to water quality, but also prevents the possible occurrence of increased operational costs in maintaining the water distribution systems.

Unit 30 - Blacktail Ridge — This large, essentially roadless area provides a major portion of the habitat (summer/fall, calving) for approximately 200 elk, as well as being endowed with resource values which can provide outstanding backcountry primitive recreational experiences. Hunting pressure (averaging 650 trips from 1973 to 1977) is heavy and is expected to increase as the BLM acquires more public access in accordance with the MFP and as rising fuel costs force hunters to hunt closer to home. If substantial increases in vehicle use occur in this area, elk security couldbe reduced to the point where elk cease using preferred habitats, such as Upper Sheep Creek and the Riley and Jake Canyon areas. Restricting public vehicle use will reduce the likelihood of the loss of security habitat and contribute toward providing more primitive, nonmotorized types of hunting and recreational opportunities.

Unit 34 - Bannack — This 305-acre tract comprises a portion of the historic town of Bannack, site of the first major gold discovery in Montana, and the first territorial capital. The town is one of only five Naitonal Register of Historic Places in Beaverhead County and is currently designated a State Park. Restricting motorized travel to the designated routes on the public lands immediately adjacent to the townsite would preserve the historic setting and also protect important cultural resources that can be viewed and interpreted from the townsite.

E. All Motorized Travel Restricted to Designated Routes from May 1 to November 30—Closed to All Vehicles from December 1 to May 1

Unit 4 - Humbug Spires Periphery — This area comprises the original Humbug Spires primitive area amd contiguous wilderness study lands; yearlong habitat for the only bighorn sheep population (est. 50-60) in Beaverhead County, and the winter habitat for about 75 elk and 350 deer. Excessive, uncontrolled vehicle travel throughout this area during the hunting season has contributed toward a recent decline in bighorn numbers. Continuing with the present primitive area closure, as proposed in the MFP, and expanding and modifying the current Moose Creek road closure to include the important bighorn, elk, and deer habitat would provide the desired protection to these animals, facilitate the provision of primitive, unconfined recreational opportunities, and conform to interim management policy for areas under wilderness review.

Unit 9 - Jake Canyon — Although this area, in combination with Unit 30, comprises valuable summer/fall habitat for an estimated 200 elk, the area's main value is that it serves as winter habitat for an estimated 140 elk. If substantial increases in vehicle use occur during summer, fall, or winter, elk security habitat could be drastically reduced in the Riley and Jake Canyon areas and important winter habitat could be virtually eliminated. Restricting vehicle travel according to the proposal will allow hunters to utilize the area essentially as they have in the past and protect the wintering elk herd.

Unit 29 - Dutch Hollow — Excessive, uncontrolled vehicle access during hunting season on higher altitude, open sagebrush mule deer habitats which lack security cover often results in deer overharvest. This area comprises this open habitat type for a large number of mule deer, as well as supporting about 300 elk for varying periods during the winter. In order to maintain the mule deer population and allow them to realize their potential, vehicles must be controlled. The proposed restrictions would provide the needed protection for the mule deer and prevent undesirable winter elk movements.

Unit 32 - Muddy Creek — Muddy Creek Basin contains numerous resources subject to disturbance from unrestricted vehicle use. Excessive vehicle travel during fall and winter is reducing security cover for an estimated 70 elk and a moderate number of deer. Portions of the area are highly erosive and several soil types have low water-holding capacities and severe compaction hazards. Active sedimentation in Muddy Creek is recognized as a major limiting factor affecting fish productivity in Big Sheep Creek. Continued unrestricted travel could accelerate erosion and lead to additional stream sedimentation and loss of productivity. The eastern slopes lie within the Hidden Pasture Wilderness Study Area.

F. All Motorized Travel Restricted to Designated Routes From October 15 to November 30—No Unauthorized Vehicle Travel From December 1 to May 1

Unit 11 - Soap Gulch North — A portion of the yearlong habitat for an estimated 50 to 60 bighorn sheep and winter habitat for approximately 75 elk and 350 mule deer are found within this unit. Bighorn numbers have decreased in recent years, primarily because of increased stress associated with excessive vehicle travel during the hunting season. Each year, new jeep trails are established on the ridges, thus magnifying the stress to sheep and,in some cases, deer and elk. Restricting vehicle travel to the designated roads from October 15 to December 1, and eliminating all vehicle travel during winter will reduce stress and maintain security habitat during the hunting season and winter.

G. All Motorized Travel Restricted To Designated Routes From October 15 to November 30

Unit 14 - Soap Gulch South — This unit, in combination with Units 4 and 11, comprises yearlong habitat for 50 to 60 bighorn sheep. Bighorn numbers have been declining in recent years due to excessive vehicle traffic during the hunting season. Restricting vehicle travel to designated ways during the hunting season would give the sheep an opportunity to maintain their numbers and possibly expand.

H. No Unauthorized Motorized Travel Permitted From May 1 to November 30 — Over-Snow Travel Permitted From December 1 to May 1

Unit 12 - Rock Creek — Prior to road construction and timber harvest in this area, elk use during summer and fall was substantial. However, clearcutting has reduced elk hiding cover, thus magnifying the disturbance to elk from vehicle travel on the many roads. Restricting vehicle use, as proposed, will allow elk to resume their summer/fall use by increasing the effective hiding cover.

I. Closed To All Motorized Travel

Unit 35 - Humbug Spries - Unit 36 - Bear Trap Canyon — These areas comprise the original Bear Trap Canyon and Humbug Spires Primitive Area. Pursuant to FLPMA, the primitive area and adjacent roadless lands are currently being studied for their suitability for preservation as wilderness. The primitive area itself was closed to motorized vehicles in 1972, and the Dillon MFP proposes to continue with that closure even if the area is not designated wilderness. Inaccessible terrain makes motorized travel virtually impossible. Continuing with the present vehicle restrictions and expanding them to include the adjacent wilderness study lands would ensure the provision of the primitive, nonmotorized forms of recreation expressly desired by the visiting public and conform to the vehicle management required in Wilderness Study Areas.

J. No Motorized Travel Permitted From December 1 to May 15

Unit 10 - Wall Creek — This area adjoins the Wall Creek Game Range, administered by the Montana Department of Fish, Wildlife, and Parks (MDFW&P). The Game Range in combination with contiguous public lands, provides winter habitat for 600 to 700 elk and 200 to 300 mule deer. The MDFW&P closes their lands from December 1 to May 15 in order to prevent human disturbance from adversely affecting these animals. Instituting identical controls on public lands would prevent undesirable big game movements and loss of otherwise suitable habitat.

APPENDIX C

LIMITED AREA OFF-ROAD TRAVEL AUTHORIZATION

U.S.D.I. - Bureau of Land Management

Dillon R.A. Authorization
198__ - ____

LIMITED AREA OFF-ROAD TRAVEL AUTHORIZATION

When signed by the authorizing officer, this single-visit permit authorizes:

Name ______________________________
Address ______________________ (Zip) __________ Telephone __________

to enter the following "limited" area ______________________________
(map code and name)

in order to conduct the following operations: ______________________________
____
____

Date of entry __________ (month) ______ (day) ______ (year) Date of Exit __________ (month) ______ (day) ______ (year)

Entry locations
and travel areas ______________________________
Number and type of vehicles ______________________________

Decision Rationale

The travel restrictions in this area were recommended in the Dillon MFP and/or Off-Road Vehicle Travel Plan to protect and/or enhance the following resources:

In MFP or ORV Plan	Resource		Resource
☐	Soils	☐	Recreation
☐	Wildlife	☐	Forestry
☐	Watershed	☐	Wilderness

Authorization of this travel will have the following beneficial and/or adverse effects:

Beneficial

Adverse

Area Manager's Decision: ☐ Approved ☐ Disapproved

Reason's for Decision ______________________________
____

Special Conditions ______________________________
____
____

______________________________ Signature of Area Manager ______ Date

APPENDIX D

DISTRIBUTION OF DILLON OFF-ROAD VEHICLE TRAVEL ENVIRONMENTAL ASSESSMENT

APPENDIX D

DISTRIBUTION OF DILLON OFF-ROAD VEHICLE TRAVEL ENVIRONMENTAL ASSESSMENT

Federal Agencies

U.S. Army Corps of Engineers
U.S. Bureau of Indian Affairs
U.S. Bureau of Land Mangement
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S. Heritage Conservation and Recreation Service
U.S. Sheep Experiment Station

Congressional Offices

Congressional Offices

U.S. Congressman, Pat Williams
U.S. Congressman, Ron Marlenee
U.S. Senator, Max Baucus
U.S. Senator, John Melcher

State Agencies

Montana Department of Fish, Wildlife and Parks
Montana Department of Health and Environmental Sciences
Montana Department of Natural Resources
Montana Department of State Lands
Montana Environmental Quality Council
Montana Governor's Office
Montana Lt. Governor's Office
Montana State Historic Preservation Office

County Commissioners and Planning Boards

Anaconda-Deer Lodge County Manager
Beaverhead County Planning Board
Madison County Commissioners
Silver Bow County Commissioners

Other Organizations

Ammon Trailriders (Idaho)
Anaconda Company
Anaconda Snowmobile Club
Anaconda Sportsmans Club
Beaverhead Cross-country Ski Club
Butte Mineral and Gem Club
Butte Silver Bow Public Library
Burlington Northern
Capital Conservation Club (Idaho)
Continental Divide Trail Society
Deer Lodge City Hall
Dillon Public Library
Ennis City Hall
Family Trail Riding Association
Gallatin Bowhunters Association
Gallatin Valley Snowmobile Association
Gallatin Wildlife Association
Great Falls Public Library
Headwater RC&D Project Office
Idaho State Historic Preservation Officer
Idaho State University Library
Inland Forest Resource Council
Intermountain Snowmobile Association
Lost Rivers-Lemhi Range Wilderness Council
Montana Association of State Grazing Districts
Montana Chapter, the Wilderness Society
Montana College of Mineral Science and Technology-Library
Montana Environmental Information Center
Montana 4X4 Association
Montana Mining Association
Montana Outfitters and Guides Association
Montana Power Company
Montana Public Lands Council
Montana Snowmobile Association
Montana State University Association
Montana Wilderness Association
Montana Wool Growers Association
Natural Resource Defense Council
Old West Regional Commission
Oregon Environmental Council
Ruby Valley Soil & Water Conservation District
St. Anthony Snowmobile Club (Idaho)
Sierra Club-Northwest Office
Skyline Sportsmen's Association
Snake River Audubon Society (Idaho)
United Four Wheel Drive Associations
University of Idaho Library
University of Montana Library
Western Montana College
Wilderness Institute, University of Montana
Wilderness Society
Wyoming State Snowmobile Association

BUREAU OF LAND MANAGEMENT
Library
Denver Service Center

Form 1279-3
(June 1984)

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